

SE Group's Copper Mountain Resort Water and Trails EA:
Class III Cultural Resource Inventory,
Summit County, Colorado

By
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Prepared by
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Eagle, Colorado

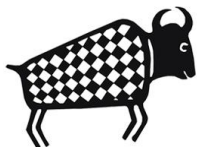
Metcalf Project no. 2018.CO.096

Prepared for
SE Group, Inc.
Frisco, Colorado
and
USDA Forest Service, White River National Forest
Glenwood Springs, Colorado

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WRNF Project No. R2018021500032

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Metcalf Archaeological Consultants, Inc.

Beyond Compliance

Est. 1980



ABSTRACT

Metcalf undertook cultural resource investigations under contract to SE Group, Inc., at Copper Mountain Resort, Summit County, Colorado, because the resort has proposed multi-season improvements. At the time of October fieldwork, the project area covered 570 acres. Because 374 acres had been previously inventoried for cultural resources, fieldwork included 196 acres of Class III pedestrian inventory in areas not covered by previous recent inventories. After Metcalf conducted the October fieldwork, project design changes were made in December, 2018; thus, some proposed developments in the updated project area, consisting of trails and camp sites, have not yet been inventoried for cultural resources. These new developments covering 84 acres will be surveyed in the 2019 field season and reported as an addendum to this document. It is anticipated that any newly discovered NRHP eligible cultural resources during 2019 survey will be avoided because the location of the proposed trails and campsites is flexible and can be easily re-designed.

During October fieldwork, five resources were newly recorded or revisited. Two are sites, and three are isolated finds. The three isolated finds are recommended as not eligible for inclusion on the National Register. The two sites (5ST109, 5ST585) were previously recorded and were updated for the current project. Both are recommended not eligible for inclusion on the National Register; however, avoidance of historic site 5ST109 is recommended due to the unknown nature and function of the cairn, Feature 2.

In addition, the OAHP-mapped site location of a collapsed and decaying multi-room log cabin with a small midden (5ST110) fell in the survey area; it was not evaluated during recording in 1976. This site was not observed during the October inventory, however, its location also overlaps the portion of the redesigned project area proposed for 2019 fieldwork; another attempt will be made to relocate the site at that time. It is possible that, if found, the site could extend into the currently reported project area.

Pending the relocation of unevaluated historic site 5ST110 in the summer of 2019, Metcalf recommends a finding of *no historic properties* for the currently reported project area. With avoidance of site 5ST109, no further work is recommended for the currently reported project area.



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Colorado Office of Archaeology and Historic Preservation

CULTURAL RESOURCE SURVEY MANAGEMENT INFORMATION FORM

| | | | |
|--|-------------------|-----------------|-------------------|
| Federal acres of Potential Effect/Project: | <u>570</u> | Acres surveyed: | <u>196</u> |
| State acres of Potential Effect/Project: | <u> </u> | Acres surveyed: | <u> </u> |
| Private acres of Potential Effect/Project: | <u> </u> | Acres surveyed: | <u> </u> |
| TOTAL | <u>570</u> | TOTAL | <u>196</u> |

Legal Location of Project *(attach additional pages if necessary)*

Principal Meridian: 6th

County: Summit

USGS Quad Name: Copper Mountain 1970 (PR 1987)

| | | | | | | | | | | | |
|----------|----|-------|-----|---------|----|----|-----|--|----|-----|--|
| Township | 6S | Range | 79W | Section | 25 | NE | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 79W | Section | 35 | SE | 1/4 | | NE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | SW | 1/4 | | NW | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | SE | 1/4 | | NW | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | NE | 1/4 | | SW | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | SW | 1/4 | | NE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | SE | 1/4 | | NE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | NE | 1/4 | | NE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | SW | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | SE | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | NE | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 79W | Section | 36 | NW | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 78W | Section | 30 | NE | 1/4 | | SW | 1/4 | |
| Township | 6S | Range | 78W | Section | 30 | NW | 1/4 | | SW | 1/4 | |
| Township | 6S | Range | 78W | Section | 30 | SW | 1/4 | | SW | 1/4 | |
| Township | 6S | Range | 78W | Section | 30 | NW | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 78W | Section | 30 | SW | 1/4 | | SE | 1/4 | |
| Township | 6S | Range | 78W | Section | 31 | NW | 1/4 | | NW | 1/4 | |
| Township | 6S | Range | 78W | Section | 31 | SW | 1/4 | | NW | 1/4 | |
| Township | 6S | Range | 78W | Section | 31 | NW | 1/4 | | SW | 1/4 | |
| Township | 6S | Range | 78W | Section | 31 | SW | 1/4 | | SW | 1/4 | |
| Township | 6S | Range | 78W | Section | 31 | SW | 1/4 | | NE | 1/4 | |
| Township | 6S | Range | 78W | Section | 31 | NW | 1/4 | | SE | 1/4 | |
| Township | 7S | Range | 79W | Section | 01 | NW | 1/4 | | NE | 1/4 | |
| Township | 7S | Range | 79W | Section | 01 | NE | 1/4 | | NE | 1/4 | |
| Township | 7S | Range | 79W | Section | 01 | SE | 1/4 | | NE | 1/4 | |



| | | | | | | | | | | | | | | |
|----------|----|--|-------|-----|--|---------|----|--|----|-----|--|----|-----|--|
| Township | 7S | | Range | 79W | | Section | 01 | | SW | 1/4 | | NE | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | NW | 1/4 | | SE | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | NE | 1/4 | | SE | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | SE | 1/4 | | SE | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | SW | 1/4 | | SE | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | NW | 1/4 | | SW | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | NE | 1/4 | | SW | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | SE | 1/4 | | SW | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 01 | | SE | 1/4 | | NW | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 02 | | NE | 1/4 | | NE | 1/4 | |
| Township | 7S | | Range | 79W | | Section | 02 | | SE | 1/4 | | SW | 1/4 | |

| Site Number | Site Type | | | | Eligibility | | | | | | | | Effect | | | Treatment / Management Recommendations | | | | | | | | Comments |
|----------------|-------------|----------|-----------------|---------|-------------|------------|--------------|--------------|------------------|------------|----------------|---------------------------------|-------------------|----------------|-----------------|--|---------|------|----------|-------------------|------------------------|-------|--|----------|
| | Prehistoric | Historic | Paleontological | Unknown | Eligible | Needs Data | Not Eligible | Contributing | Non-Contributing | Supporting | Non-Supporting | No Historic Properties Affected | No Adverse Effect | Adverse Effect | No Further Work | Avoid / Preserve | Monitor | Test | Excavate | Archival Research | Archival Documentation | Other | | |
| SITES | | | | | | | | | | | | | | | | | | | | | | | | |
| 5ST109 | | X | | | | | X | | | | | X | | | | X | | | | | | | | |
| 5ST585 | | X | | | | | X | | | | | X | | | X | | | | | | | | | |
| ISOLATED FINDS | | | | | | | | | | | | | | | | | | | | | | | | |
| 5ST1543 | | X | | | | | X | | | | | X | | | X | | | | | | | | | |
| 5ST1544 | | X | | | | | X | | | | | X | | | X | | | | | | | | | |
| 5ST1545 | | X | | | | | X | | | | | X | | | X | | | | | | | | | |



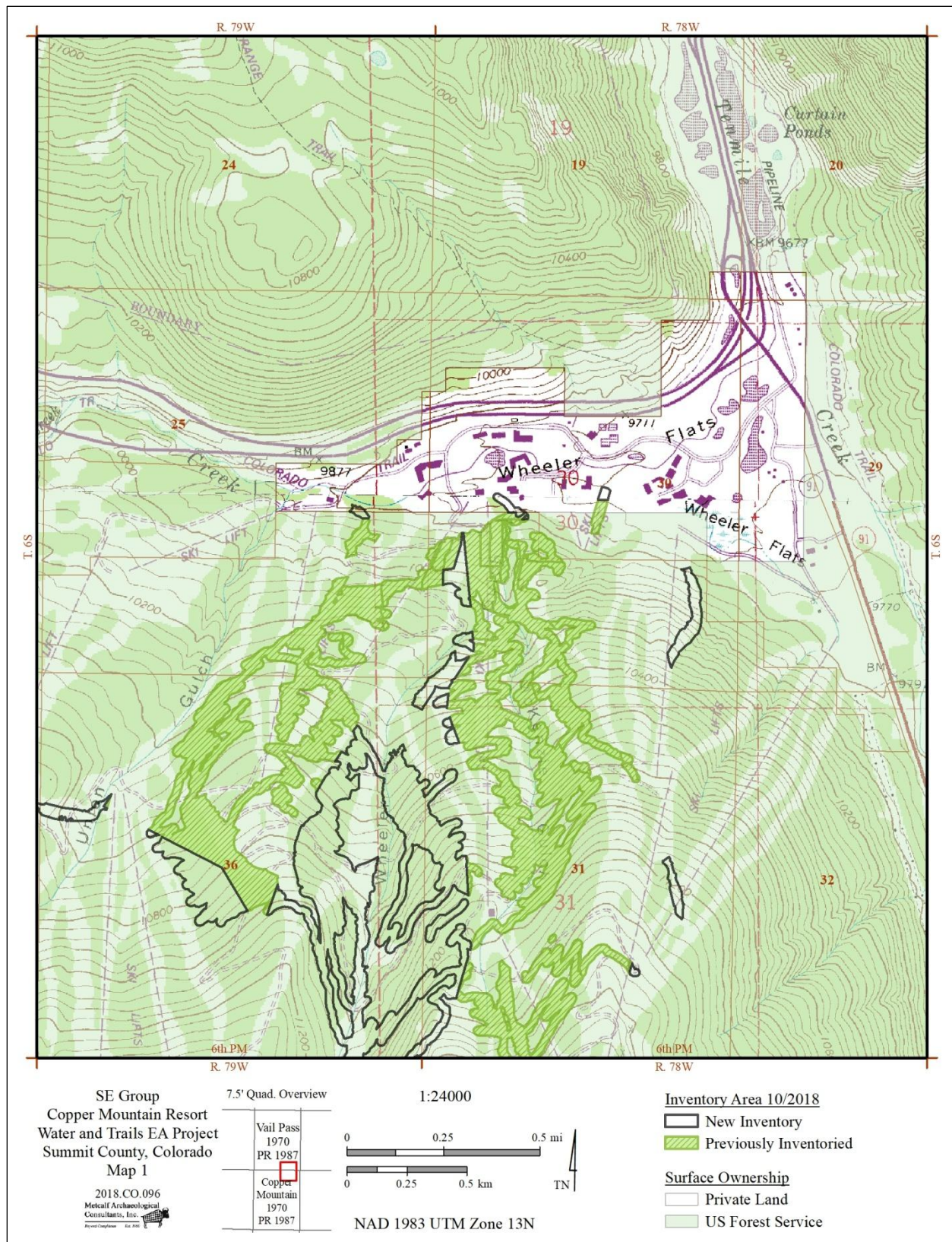


Figure 1. Project area location showing October 2018 fieldwork, Map 1 of 2



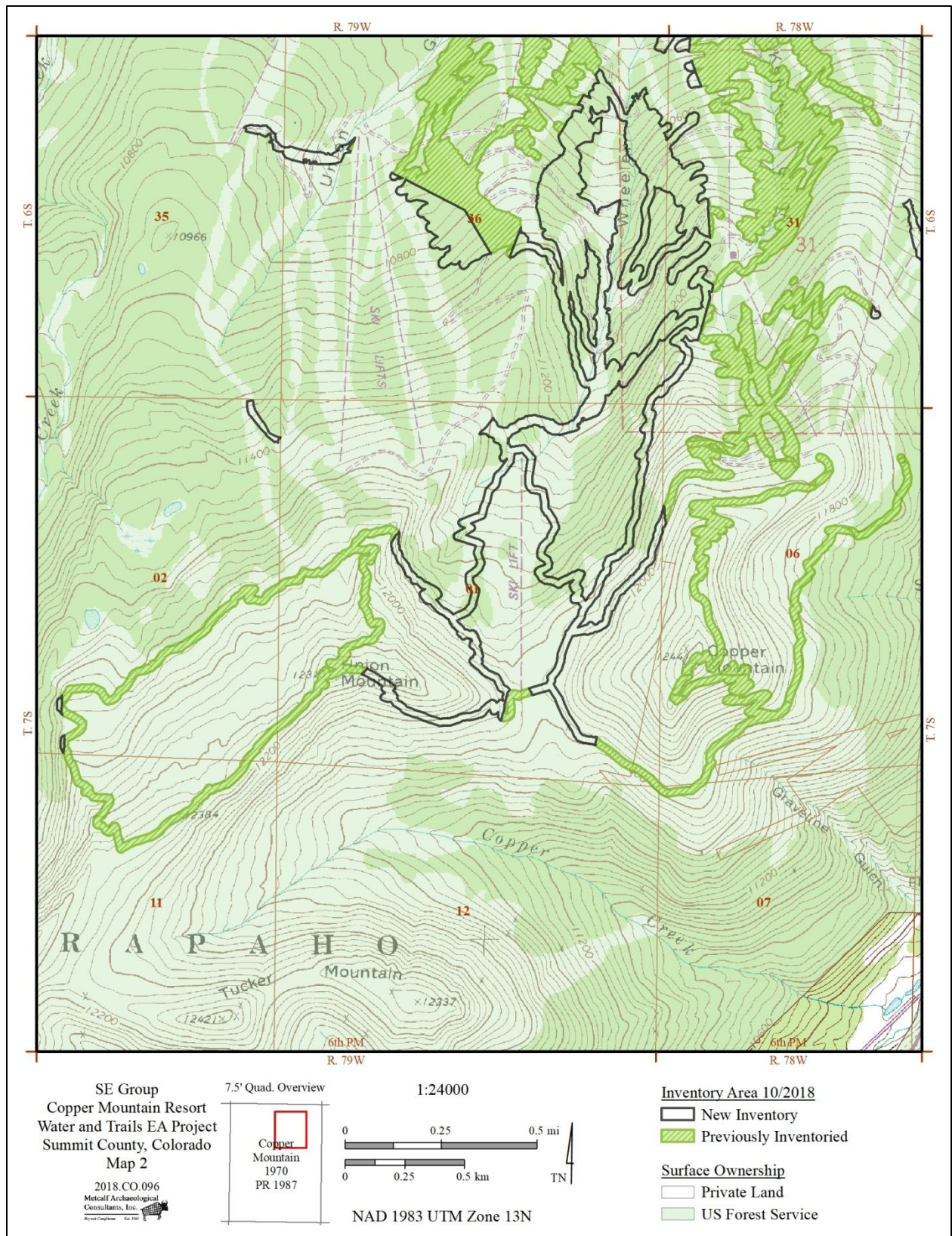


Figure 2. Project area location showing October 2018 fieldwork, Map 2 of 2



INTRODUCTION

Metcalf Archaeological Consultants, Inc. (Metcalf) conducted cultural resource investigations at Copper Mountain Resort, in Summit County, Colorado, for planned multi-season improvements (Figure 1, Figure 2 above). This work was conducted under contract to SE Group, Inc., Frisco, Colorado.

The project area is located in Township (T) 6S Range (R) 78W, sections 30 and 31; T6S R79W, sections 25, 35, and 36; T7S R78W, sections 6 and 7; and T7S R79W, sections 1, 2, 11, and 12. It is entirely on public land administered by the USDA Forest Service, White River National Forest (WRNF), in the Dillon Ranger District. The Forest Service is required to comply with Section 106 of the National Historic Preservation Act in permitting this new development. Metcalf's investigations and this report serve to help facilitate the Forest Service's Section 106 compliance.

Copper Mountain Resort plans several individual efforts as part of their multi-season development. These efforts include expansion of snowmaking coverage, expansion of the existing mountain bike trail network, implementation of hiking trails, extension of an existing road, and creation of camping-oriented summer programs. For the purposes of this investigation, the area of potential effect (APE) for both direct and indirect effects is considered to be the footprints of ground disturbance for the different development areas. The APE in this report refers to the project area as defined at the time of October 2018 fieldwork (Figure 1, Figure 2).

An Environmental Analysis (EA) for Copper Mountain Resort's improvements is currently in progress by the Forest Service. Due to project design changes in December, 2018 after Metcalf conducted the currently reported October fieldwork, some proposed developments in the redesigned project area (consisting of campsites and trails) have not yet been inventoried for cultural resources. Before implementing any approved project activities at Copper Mountain outside the currently reported October 2018 project area, the new developments will be surveyed using established protocol. Figure 3 and Figure 4 depict the redesigned project boundary which now includes 551 acres, consisting of 144 acres covered by Metcalf's October 2018 fieldwork, 323 acres covered by earlier inventories, and 84 acres requiring additional inventory (see Appendix A: Maps 5 to 8 for previous inventories and resources in the redesigned project area). Metcalf plans to conduct fieldwork on the latter 84 acres in 2019 when sufficient snowmelt has occurred to allow ground visibility. The results of the new survey will be addressed in an addendum to the current report that will be submitted to SE Group and WRNF for review. It is anticipated that any newly discovered NRHP eligible cultural resources during 2019 survey will be avoided because the location of the proposed trails and campsites is flexible and can be easily re-designed.

Importantly, the "Project Area" identified in Figure 1 and Figure 2 reflects the project area boundary prior to the December 2018 design changes. All specific areas of potential effect are shown, and they cover 570 acres. Due to adequate coverage by previous inventories, however, 374 acres of the Project Area did not require inventory as agreed during consultation with Tom Fuller, Heritage Program Director for the WRNF. Specifically, 196 acres underwent intensive cultural resource inventory for this project during October 2018.



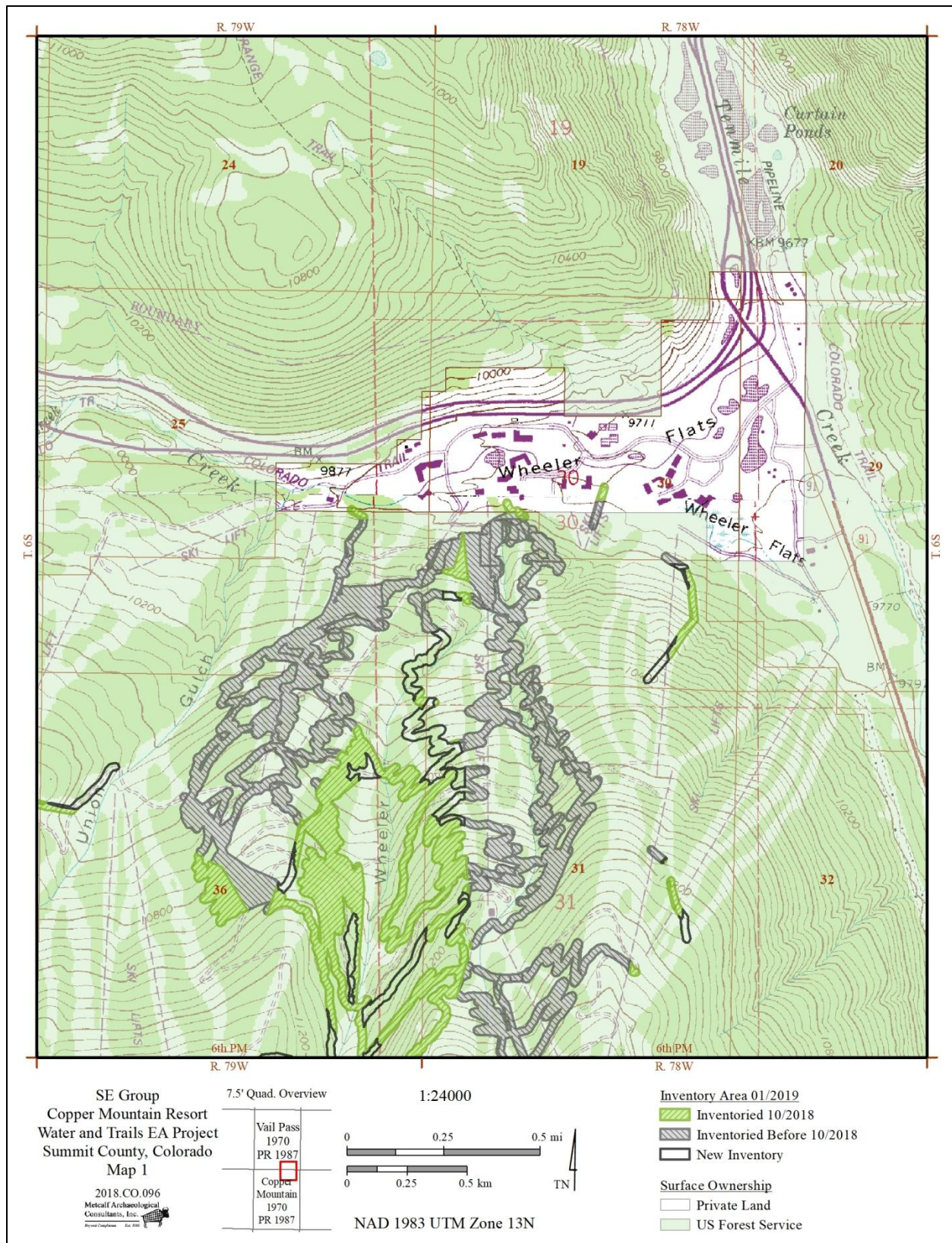


Figure 3. Redesigned project area showing additional fieldwork planned for 2019, Map 1 of 2



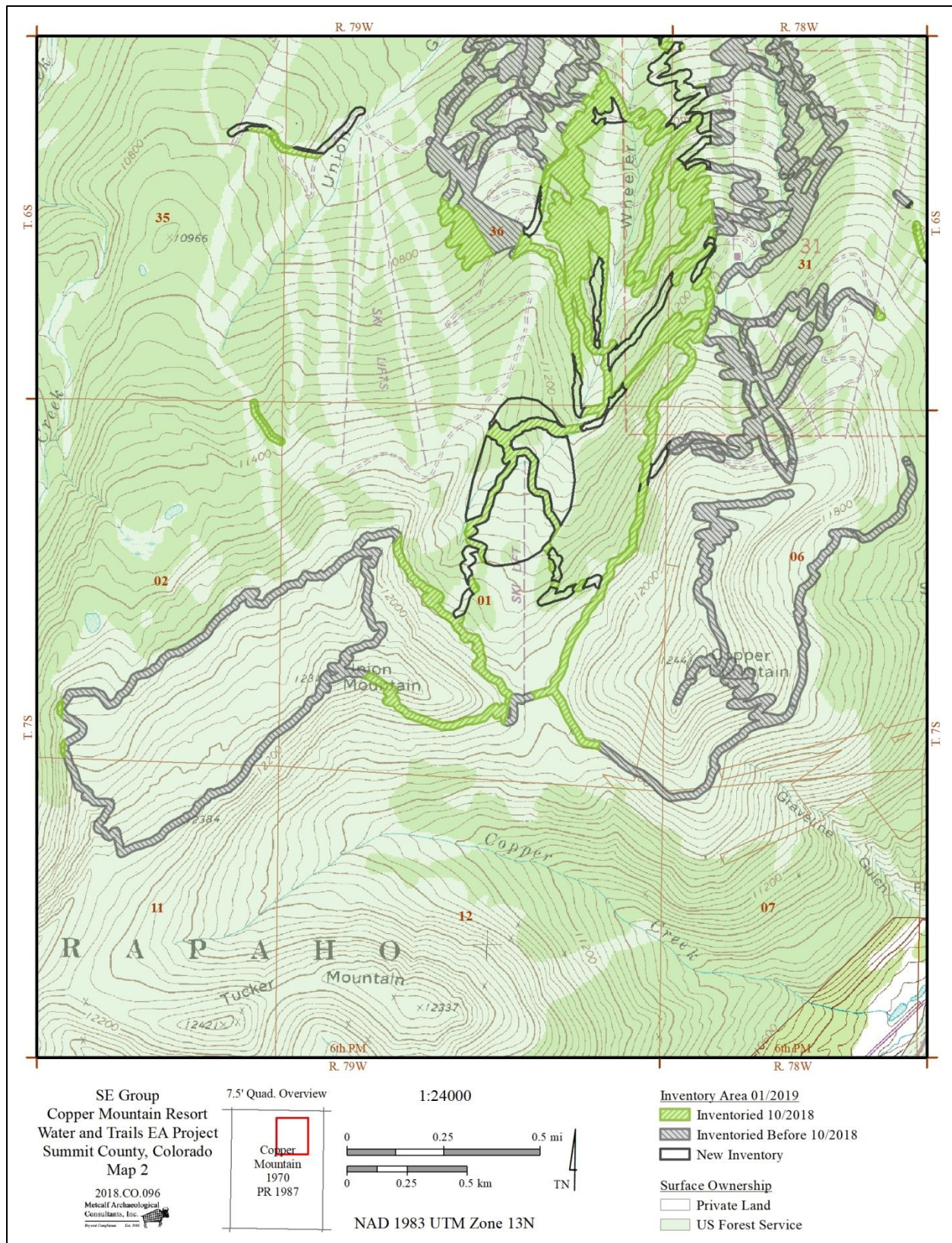


Figure 4. Redesigned project area showing additional fieldwork planned for 2019, Map 2 of 2



Fieldwork was conducted between 2 and 5 October, 2018 by Kelly Pool, John Scott, Garrett Williams, and Dante Nicolais. Weather was favorable for fieldwork with cool conditions. Work was conducted under USDA Forest Service Permit for Archaeological Investigations, Authorization ID #CAN611HR (expires 12/31/2020).

EFFECTIVE ENVIRONMENT

Williams (2016:2-3) provided an excellent discussion of the local environment for a recent Metcalf project at Copper Mountain Resort, and it is reproduced here:

The project area is located within the [White River] National Forest in the Southern Rocky Mountain physiographic province (Fenneman 1946). The area is generally characterized by steep mountain slopes, hills, ridges, and canyons. The project area is further located in the Gore Range, approximately six miles southwest of the community of Frisco in north-central Colorado. More specifically, the project area is on the northern faces of Copper Mountain and Union Mountain, within and adjacent to developed ski areas at Copper Mountain Resort. It overlooks West Tenmile Creek to the north, which flows east to its confluence with Tenmile Creek, which in turn flows northeast into the Dillon Reservoir.

The underlying geology mostly consists of Permian and Pennsylvanian-aged Maroon Formation sedimentary rocks, including Arkosic sandstone, siltstone, conglomerate, and local limestone. The lower slopes are mantled with Pleistocene-age glacial drift of the Bull Lake and Pinedale glaciations (Tweto 1979). Glacial action was prevalent along the Continental Divide and extended down most major side valleys. These glacial processes formed broad, steep, west-sloping ridges bordered by generally broad and steep U-shaped valleys which extend down from the hummocky, gentle to steep landscape at and above timberline (Black 1982).

The surface sediment within the project area is shallow and rocky, dark brown silty sand. Sediments are deflated and slopewashed with little potential for depth given the steep, north-facing slope of the project area. Sediments are limited to a thin O horizon consisting of organic duff with a thin underlying layer of humus and mixed dark brown silty sand with common gravels and cobbles. No official soil surveys have been carried out within the project area (United States Department of Agriculture 2016).

The elevation of the project area varies from about [9,700] feet to [12,300] feet above mean sea level (amsl). Drainages in the area include Union Gulch, Wheeler Gulch, and McKenzie Gulch, all of which flow north towards east-flowing West Tenmile Creek. Vegetation consists primarily of subalpine, lodgepole pine forest with ponderosa pine, spruce, and fir trees with a moderate understory of short grasses, shrubs, and forbs. Overall ground visibility was generally poor at about 20 percent, although it was patchy, with low to no



visibility within the lodgepole forest and moderate visibility within ski runs and disturbed areas.

The climate is typical of the Rocky Mountain region with low humidity and abundant sunshine. Afternoon showers are common in the spring and summer, with a warm fall and a cool, sunny, and snowy winter. Paleoclimate was similar, though with variations in both temperature and moisture. Several water sources in the area provide for an abundant and diverse faunal population including ground squirrel, rabbit, fox, golden eagle, magpie, marmot, mule deer, elk, mountain lion, and black bear.

Weather conditions during fieldwork were generally sunny and cool. Current land use is largely recreational, with winter skiing and summer hiking and biking.

PREVIOUS WORK AND CULTURE HISTORY

Metcalf requested formal files searches from the Colorado Office of Archaeology and Historic Preservation (OAHP) consisting of the project area plus all sections within a one-mile buffer. The formal files search included Sections 19-20 and 29-32 of T6S, R78W; Sections 23-27 and 34-36 of T6S, R79W; Sections 5-8 of T7S R 78W; and Sections 1-3 and 10-12 of T7S, R79W. It covers the project area inventoried during October fieldwork as well as the December 2018 project design changes. The files search was received from OAHP on January 11, 2019, and it supplemented Metcalf's extant files search data from the WRNF (Williams 2016), Compass, and Metcalf's previous work in the area (Table 1, Table 2).

The OAHP files search revealed 18 previous inventories in the files-searched sections; Metcalf's recent work in the project area (Williams 2016) is not yet depicted in OAHP data. In addition, three projects that are not listed by OAHP are in WRNF files. In all, 10 previous inventories from OAHP and WRNF data intersect the current project area (Table 1). These overlapping projects (MC.FS.NR172, ST.FS.NR88, ST.FS.R1, ST.FS.R18, ST.FS.R56, ST.FS.R57, ST.FS.R8, R2014021500024, R1987021500032, R1991021510005) were related to ski area expansion, communication pads, and a land exchange. Following WRNF guidance, Metcalf excluded 374 acres of inventory from the October project area, consisting of areas previously surveyed by more recent projects MC.FS.NR172, ST.FS.NR88, ST.FS.R1, ST.FS.R18, ST.FS.R57, ST.FS.R8, R2014021500024, R1987021500032, and R1991021510005 but not project ST.FS.R56 from 1976. Other nearby previous projects include several for mining operations, a fiber optic system, Interstate 70, and a land exchange. Inventories overlapping the October 2018 APE are shaded grey in Table 1.

The OAHP files search revealed 94 previously recorded cultural resources in the file-searched area; six additional resources that are not in OAHP data are in WRNF files (5ST452-453, 5ST455-458). These 100 resources are 53 sites and 47 isolated finds (Table 2). Twelve previously recorded resources are in the APE of October fieldwork, including four sites (5ST110, 5ST429, 5ST430, 5ST431) and eight isolates (5ST458, 5ST587-5ST590, 5ST592, 5ST613, 5ST615). Generally, most of the previously recorded resources in the area are historic in nature and include log structures, artifact scatters, resource related to mining activities, and



transportation. The few prehistoric sites are all chipped stone scatters. Previously recorded resources overlapping the October 2018 APE are shaded grey in Table 2.

Table 1. Files search results for previous inventories within one mile of the project area

| OAHP Doc. # / USFS Doc. # | Project Title | Institution | Year |
|--|---|-----------------------|-------------|
| MC.CH.R96 | A CULTURAL RESOURCE SURVEY OF INTERSTATES 25, 70, 225, AND 270, U.S. HIGHWAYS 34 AND 160, AND STATE HIGHWAYS 13 AND 470, FOR THE PROPOSED ADESTA COMMUNICATIONS FIBER OPTIC SYSTEM, COLORADO (C SW00-102) | Centennial | 1999 |
| MC.FS.NR15 / R1992021506023 | CELLULAR ONE COMMUNICATION PADS AND ACCESS ROADS CULTURAL RESOURCES INVENTORY IN CLEAR CREEK, SUMMIT AND EAGLE COUNTIES, COLORADO (CRR# 15-06-23-92) | Metcalf | 1993 |
| MC.FS.NR172 / R2005021510063 R2008021510063 | CULTURAL RESOURCE SURVEY AND MONITORING OF SMALL PROJECTS ON BRECKENRIDGE, KEYSTONE, AND COPPER MOUNTAIN SKI AREAS, SUMMIT AND EAGLE COUNTIES, DILLON RANGER DISTRICT | USFS- WRNF | 2005 |
| MC.FS.NR92 | RESULTS OF THE AMERICAN METAL CLIMAX CORPORATION AND THE UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE, LAND EXCHANGE ARCHAEOLOGICAL INVENTORY | USFS- ARNF | 1974 |
| MC.FS.R253 | ARCHAEOLOGICAL RECONNAISSANCE OF THE SELECTED USFS LANDS, CLIMAX LAND EXCHANGE AND APPENDIX | LOPA | 1979 |
| ST.CH.R2 / IR 70-2(176) | CULTURAL RESOURCE SURVEY OF I-70 BETWEEN SILVERTHORNE AND FRISCO AT THE SH 91 INTERCHANGE, SUMMIT COUNTY, IR 70-2(176) | CDoW | 1990 |
| ST.FS.NR88 / R2011021500055 | CULTURAL RESOURCE INVENTORY OF THE COPPER MOUNTAIN BIKE TRAIL REROUTE, SUMMIT COUNTY (R2011021500055) | USFS- WRNF | 2011 |
| ST.FS.R1 / R1985021510021 | A CLASS III CULTURAL RESOURCE INVENTORY OF THREE EXPANSION AREAS ON COPPER MOUNTAIN, SUMMIT COUNTY | TRC | 1986 |
| ST.FS.R110 / R2007021500049 | A CLASS III CULTURAL RESOURCE INVENTORY OF THE TEN MILE CANYON MINE SAFETY CLOSURES SUMMIT COUNTY, COLORADO, WHITE RIVER NATIONAL FOREST | USFS- WRNF | 2009 |
| ST.FS.R18 / R1993021510033 | A CULTURAL RESOURCE SURVEY OF COPPER BOWL, SUMMIT COUNTY (CRR 15-10-33-93) | TRC | 1993 |
| ST.FS.R25 | WESTERN LAND GROUP SUMMIT LAND EXCHANGE CLASS III CULTURAL RESOURCE INVENTORY SUMMIT COUNTY, COLORADO. | Metcalf | 1999 |
| ST.FS.R35 / R2003021510003 | SE GROUP COPPER MOUNTAIN RESORT: CLASS III CULTURAL RESOURCE INVENTORY, SUMMIT COUNTY, COLORADO (CRR#15-10-03-03) | Metcalf | 2002 |
| ST.FS.R56 / R1976021510004 R1976021510005 | CULTURAL RESOURCE INVENTORY REPORT: SKI TRAIL NUMBER 2, COPPER MOUNTAIN, INCORPORATED (ORIGINAL REPORT) CULTURAL RESOURCE INVENTORY REPORT: 'A' LIFT AREA, UNION BOWL, COPPER BOWL, I-1 LIFT AREA AND EXTENSION, 0 LIFT AREA, 17 GLADE, 37 GLADE, AND 22-33-27 AREA (ADDENDUM) | G&K | 1976 |
| ST.FS.R57 / R1984021510042 | A CLASS III CULTURAL RESOURCE INVENTORY OF THE COPPER MOUNTAIN EXPANSION AREAS, SUMMIT COUNTY | TRC | 1984 |



| OAHP Doc. # / USFS Doc. # | Project Title | Institution | Year |
|--|---|----------------|-------------|
| ST.FS.R8 / R1990021510038 | A CLASS III CULTURAL RESOURCE INVENTORY AT COPPER MOUNTAIN, SUMMIT COUNTY (CRR 15-10-38-90) | TRC | 1989 |
| ST.FS.R87 / R2005021510045 | THE CULTURAL RESOURCE SURVEY OF THE COPPER MOUNTAIN RESORT WINTER DAM REPLACEMENT PROJECT, SUMMIT COUNTY (R2005021510045) | USFS- WRNF | 2005 |
| ST.FS.R92 | A PRELIMINARY REPORT ON A CLASS III CULTURAL RESOURCE INVENTORY OF A PROPOSED EGRESS ROAD ON COPPER MOUNTAIN SKI AREA, SUMMIT COUNTY, COLORADO | USFS- WRNF | 1985 |
| ST.FS.R94 / R2007021500059 | COPPER MOUNTAIN RESORT TENMILE CREEK FACILITIES IMPROVEMENTS AND RESTORATION PROJECT A CLASS III CULTURAL RESOURCE INVENTORY FOR SE GROUP IN SUMMIT COUNTY, COLORADO (ORIGINAL AND ADDENDUM) | Metcalf | 2007 |
| R2014021500024 | CRI OF ON-MTN DEVELOPMENTS AT COPPER MTN | Metcalf | 2013 |
| R1987021500032 | CLASS III CRI OF 753 ACRES ON COPPER MOUNTAIN | | 1987 |
| R1991021510005 | CULTURAL RESOURCE RECON & INVENTORY OF 6 PARCELS OF HOMESTAK | | 1991 |
| Centennial=Centennial Archaeology, Inc.; CDoH=Colorado Department of Highways; G&K=Gordon and Kranzush Archaeological Consultants; LOPA=Laboratory of Public Archaeology-CSU; Metcalf=Metcalf Archaeological Consultants, Inc.; TRC=TRC Mariah Associates, Inc; USFS-ARNF=United States Forest Service, Arapaho & Roosevelt National Forests; USFS-WRNF=United States Forest Service, White River National Forest | | | |

Table 2. Files search results for previous resources within one mile of the project area

| Resource No. | NRHP Status | General Age | Site Type/Name | Institution | Year | OAHP Doc. No. | In APE |
|-----------------|----------------|-----------------|----------------------------|-----------------|-------------|--------------------------------|------------|
| 5ST.101 | NE | Historic | Mine prospect/tent camp | USFS | 1976 | ST.FS.R56; ST.FS.R1 | No |
| 5ST.102 | UNK | Historic | First Cabin | G&K | 1976 | ST.FS.R56 | No |
| 5ST.103 | NE | Historic | Road and trash scatter | G&K; Metcalf | 1976 | ST.FS.R56 | No |
| 5ST.104 | UNK | Historic | Sheep pens | G&K | 1976 | ST.FS.R56 | No |
| 5ST.108 | UNK | Historic | Touring Cabins | G&K | 1976 | ST.FS.R56 | No |
| 5ST.109 | UNK | Historic | Habitation - log cabin | G&K | 1976 | ST.FS.R56 | No |
| 5ST.110 | UNK | Historic | Wheeler Ruins | G&K | 1976 | ST.FS.R56 | Yes |
| 5ST.126 | NE | Historic | Habitation - log cabin | CDoH | 1977 | No OAHP doc. no. associated | No |
| 5ST.131 | UNK | Prehistoric | Lithic scatter | J. Gooding | 1975 | No OAHP doc. no. associated | No |
| 5ST.137 | UNK | Prehistoric | Lithic scatter | LOPA | 1978 | MC.FS.R253 | No |
| 5ST.138 | UNK | Prehistoric | Lithic scatter | LOPA | 1978 | MC.FS.R253 | No |
| 5ST.139 | UNK | Prehistoric | Lithic scatter | LOPA | 1978 | MC.FS.R253 | No |
| 5ST.140 | UNK | Historic | Habitation - Trash scatter | LOPA | 1978 | MC.FS.R253 | No |
| 5ST.152 | NE | Historic | Wheeler Guard Station | USFS | 1981 | ST.FS.R16; MC.FS.R135 | No |
| 5ST.317 | NE | Historic | Isolated find | TRC | 1984 | ST.FS.R57 | No |
| 5ST.329 | NE | Historic | Wheeler ~ Solitude | Unknown | 1979 | No OAHP doc. no. associated | No |
| 5ST.330 | NE | Historic | Lind Olie Homestead | Unknown | 1975 | No OAHP doc. no. associated | No |
| 5ST.332 | NE | Historic | Woodside Narrows | Unknown | 1979 | No OAHP doc. no. associated | No |
| 5ST.421 | NE | Historic | Bridge - F-12-AG | CDoH | 1985 | MC.CH.R1 | No |
| 5ST.428 | NE | Prehistoric | Lithic scatter | TRC | 1985 | ST.FS.R1 | No |



| Resource No. | NRHP Status | General Age | Site Type/Name | Institution | Year | OAHP Doc. No. | In APE |
|----------------|-------------|-----------------|------------------------------|-----------------|-------------|-------------------------|------------|
| 5ST.429 | NE | Historic | Prospect pit | TRC | 1985 | ST.FS.R1; ST.FS.R134 | Yes |
| 5ST.430 | NE | Historic | Mine | TRC | 1985 | ST.FS.R1 | Yes |
| 5ST.431 | NE | Historic | Prospect pit | TRC | 1985 | ST.FS.R1 | Yes |
| 5ST.432 | NE | Historic | Habitation - log cabin | TRC | 1985 | ST.FS.R1 | No |
| 5ST.433 | NE | Historic | Habitation - log cabin | TRC | 1985 | ST.FS.R1 | No |
| 5ST.434 | NE | Historic | Isolated find | TRC | 1985 | ST.FS.R1 | No |
| 5ST.435 | NE | Historic | Isolated find | TRC | 1985 | ST.FS.R1 | No |
| 5ST.452 | ND | Historic | Log cabin and foundation | TRC | 1987 | | No |
| 5ST.453 | ND | Historic | Mine shaft and spoil pile | TRC | 1987 | | No |
| 5ST.455 | ND | Historic | Log structure and mine shaft | TRC | 1987 | | No |
| 5ST.456 | UNK | Unknown | Unknown site | TRC | 1987 | | No |
| 5ST.457 | ND | Prehistoric | Isolated resource, 1 flake | TR | 1987 | | No |
| 5ST.458 | UNK | Unknown | Isolated resource | TRC | 1987 | | Yes |
| 5ST.460 | NE | Historic | Bridge - F-12-AN | CDoH | 1987 | MC.CH.R163; MC.CH.R4 | No |
| 5ST.461 | NE | Historic | Bridge - F-12-AO | CDoH | 1987 | MC.CH.R163; MC.CH.R4 | No |
| 5ST.478 | NE | Historic | Trash scatter | TRC | 1989 | ST.FS.R8 | No |
| 5ST.479 | NE | Historic | Trash scatter | TRC | 1989 | ST.FS.R8 | No |
| 5ST.480 | ND | Historic | Railroad grade | TRC | 1989 | ST.FS.R8 | No |
| 5ST.481 | NE | Historic | Mining camp | TRC | 1989 | ST.FS.R8 | No |
| 5ST.482 | NE | Historic | Mining complex | TRC | 1989 | ST.FS.R8 | No |
| 5ST.483 | NE | Historic | Mining complex | TRC | 1989 | ST.FS.R8 | No |
| 5ST.484 | NE | Historic | Habitation - log cabin | TRC | 1989 | ST.FS.R8 | No |
| 5ST.485 | NE | Historic | Mining complex | TRC | 1989 | ST.FS.R8 | No |
| 5ST.486 | NE | Historic | Isolated find | TRC | 1989 | ST.FS.R8 | No |
| 5ST.487 | NE | Historic | Isolated find | TRC | 1989 | ST.FS.R8 | No |
| 5ST.488 | NE | Historic | Mining complex | TRC | 1989 | ST.FS.R8 | No |
| 5ST.582 | NE | Historic | Mine | TRC | 1993 | ST.FS.R18 | No |
| 5ST.583 | NE | Historic | Mine | TRC | 1993 | ST.FS.R18 | No |
| 5ST.584 | NE | Historic | Wooden structure | TRC | 1993 | ST.FS.R18 | No |
| 5ST.585 | NE | Historic | Mine | TRC | 1993 | ST.FS.R18 | No |
| 5ST.586 | NE | Historic | Isolated feature | Metcalf; TRC | 1993 | ST.FS.R18 | No |
| 5ST.587 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.588 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.589 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.590 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.591 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.592 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.593 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.594 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.595 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.596 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.597 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.598 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.599 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.600 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.601 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.602 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.603 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |



| Resource No. | NRHP Status | General Age | Site Type/Name | Institution | Year | OAHF Doc. No. | In APE |
|---|-------------|-----------------|---|-------------------------|-------------|-----------------------------|------------|
| 5ST.604 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.605 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.606 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.607 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.608 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.609 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.610 | NE | Historic | Isolated find | TRC | 1993 | ST.FS.R18 | No |
| 5ST.611 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.612 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.613 | NE | Historic | Isolated find | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.614 | NE | Historic | Isolated find | TRC | 1993 | ST.FS.R18 | No |
| 5ST.615 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | Yes |
| 5ST.616 | NE | Historic | Isolated find | TRC | 1993 | ST.FS.R18 | No |
| 5ST.617 | NE | Historic | Isolated find | TRC | 1993 | ST.FS.R18 | No |
| 5ST.618 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.619 | NE | Historic | Isolated feature | TRC | 1993 | ST.FS.R18 | No |
| 5ST.892.1 | NE | Historic | Interstate 70 | State of Colorado; ACRE | 2002 | ST.FS.R106; MC.SHF.R85 | No |
| 5ST.892.4 | SUP | Historic | Interstate 70, Vail Pass | Dill Historians; CDOT | 2015 | No OAHF doc. no. associated | No |
| 5ST.903 | NE | Historic | Isolated feature | Metcalf | 2002 | ST.FS.R35 | No |
| 5ST.1044 | NE | Historic | Isolated find | USFS-WRNF | 2005 | ST.FS.R87 | No |
| 5ST.1045 | NE | Historic | Isolated find | USFS-WRNF | 2005 | ST.FS.R87 | No |
| 5ST.1046 | NE | Historic | Isolated find | USFS-WRNF | 2005 | ST.FS.R87 | No |
| 5ST.1094 | NE | Historic | Spaulding Gulch Cabin | USFS-WRNF | 1985 | ST.FS.R92 | No |
| 5ST.1181 | NE | Historic | Isolated feature | BLM-GFO; USFS-WRNF | 2007 | ST.FS.R110 | No |
| 5ST.1189 | NE | Historic | Isolated feature | USFS-WRNF | 2007 | ST.FS.R110 | No |
| 5ST.1190 | NE | Historic | Copper Creek Mine | USFS-WRNF | 2007 | ST.FS.R110 | No |
| 5ST.1206.1 | NE | Historic | Denver and Rio Grande Railroad - Copper Mountain Branch | Metcalf | 2007 | ST.FS.R94 | No |
| 5ST.1213 | NE | Historic | Homestead | Metcalf | 2007 | ST.FS.R94 | No |
| 5ST.1214 | NE | Historic | Tenmile stock bridge | Metcalf | 2007 | ST.FS.R94 | No |
| 5ST.1216.1 | NE | Historic | Tenmile stock trail | Metcalf | 2007 | ST.FS.R94 | No |
| 5ST.1230 | NE | Historic | Trash scatter | Metcalf | 2007 | ST.FS.R94 | No |
| 5ST.1231 | NE | Historic | Trash scatter | Metcalf | 2007 | ST.FS.R94 | No |
| E=Eligible; NE=Not eligible; UNK=Eligibility unknown or not provided on site form | | | | | | | |
| ACRE=Associated Cultural Resource Experts; CDoH=Colorado Department of Highways; G&K=Gordon and Kranzsch Archaeological Consultants; LOPA=Laboratory of Public Archaeology-CSU; Metcalf=Metcalf Archaeological Consultants, Inc.; TRC=TRC Mariah Associates, Inc; USFS-ARNF=United States Forest Service, Arapaho & Roosevelt National Forests; USFS-WRNF=United States Forest Service, White River National Forest | | | | | | | |



Three of the four sites in the October APE are mining-related, recorded by TRC in 1985 as part of a Copper Mountain Resort expansion project (Acklen 1986). Site 5ST429 is two prospect pits; site 5ST430 is a mine; and site 5ST431 is one prospect pit. All three sites have been determined not eligible, with OAHP concurrence, and were thus not revisited during the current project. All three lay in previously surveyed portions of the APE that did not require re-inventory.

The fourth site, 5ST110 or Wheeler Ruins, was recorded by Gordon and Kranzush (1976) during a Copper Mountain Resort inventory. It was described as a multi-room log cabin with a small midden, and they noted the site's condition as "badly decomposed and in state of collapse—probably disturbed by recent recreation." It was not evaluated at the time of recording, and avoidance was recommended. The site was not observed during the October inventory. However, its OAHP-mapped location overlaps the redesigned project area proposed for 2019 fieldwork, and another attempt will be made to relocate it at that time (Appendix A, Map 8).

As isolated resources that are generally considered insignificant, none of the eight previously recorded isolated finds in the APE (5ST458, 5ST587-5ST590, 5ST592, 5ST613, 5ST615) were revisited for the current project. Seven (5ST587-5ST590, 5ST592, 5ST613, 5ST615) lay in previously surveyed portions of the APE that did not require re-inventory. Recorded during a TRC survey for Copper Mountain Resort (Acklen 1993), these isolates included prospect pits (5ST587, 5ST592); historic rock piles (5ST588, 5ST590); an adit (5ST589); a tin can fragment (5ST613); and a historic depression, possibly a foxhole (5ST615). Only one isolate (5ST458) lay in a current inventory area, and no artifacts or features were observed during the current inventory in its mapped location. This isolate was recorded by TRC in 1985 as part of a Copper Mountain Resort expansion project (Acklen 1986).

Two previously recorded sites that were mapped near the APE were revisited and updated for the current project; both are discussed in detail with project results, below. Site 5ST109, a cabin and a cairn, was not evaluated during original recording. It was found 300 ft south of its OAHP-plotted location and re-recorded with a new map plot. It is recommended to be not eligible for inclusion on the National Register and is outside the APE of the current project. Site 5ST585 was revisited because its NRHP evaluation lacked OAHP concurrence. It was found roughly 100 ft northeast of its OAHP-plotted location. Metcalf agrees with the existing not eligible recommendation, and the site is outside the APE of the current project.

The General Land Office (GLO) plats for the townships containing the project area were accessed on-line by Metcalf in October of 2018 via the BLM's Federal Land Records Site (www.glorerecords.blm.gov). The original plats of the T6S R 78W township (1883), the T7S R 78W township (1883), the T6S R 79W township (1885), and the T7S R 79W township (1885) show no cultural features in the project area.

Historic USGS quadrangles, examined on-line via the USGS Historical Topographic Map Explorer (<http://historicalmaps.arcgis.com/usgs/>), reveal that the oldest USGS topo map of the area is the 1:250,000 scale Leadville quadrangle from 1891. The oldest 7.5' quadrangle is the Copper Mountain quad from 1970; this quad, photo-revised in 1987, is the version currently available. None of these maps, prior to the 1987 photo-revised Copper Mountain quad, show any cultural features in the project area. The only historic resources depicted on these maps near



the project area are historic roads, including a trail along Wheeler Gulch and trails along Wheeler Flats. These trails were not encountered during the current project.

An overview of the prehistoric culture history of the area is provided in *Colorado Prehistory: A Context for the Northern Colorado River Basin* (Reed and Metcalf 1999). Regarding local history, the theme-based Historic Period context of the area is available in *Colorado History: A Context for Historical Archaeology* (Church et al. 2007). The reader is directed to those documents for general information, and Williams (2016:4) provides a good summary of history and land use specific to the Copper Mountain project area:

Historic land use in this area was initially limited to explorers and fur trappers who generally utilized the region's major drainages. While trappers and explorers moved through the general area, European use and subsequent settlement of the landscape surrounding Copper Mountain began with the Colorado gold rush in 1859 when thousands emigrated to the Breckenridge area to try their fortunes. Acklen and Earls (1987) provide a summary of both the prehistory and history of the more immediate area surrounding the current project area. Graveline Gulch to the east of the project area became the center of mining activity around Copper Mountain. The easily accessible gold did not last, and the miners went elsewhere to seek their fortunes. By the end of the 1860s, the population in the area that later became Summit County had precipitously dropped to a few hundred (Acklen and Earls 1987).

Silver was discovered along Tenmile Creek in 1879 and touched off another cycle of booming mining activities. Numerous towns sprang up along the creek, bringing more people into the area. Rich strikes in Leadville swelled the population to over 35,000, which brought a related boom and overexploitation of the forest resources. The forests in the Copper Mountain area were clear cut to supply the mines with support timbers, the smelters with fuel, the associated camps and towns with building materials, and new railroads with construction materials.

Following this boom period, in 1893, Congress effectively de-monetized silver, which resulted in the "silver panic" and a lengthy local economic downturn (Aspen Historical Society 2014). The mining boom in the Rockies drove the expansion of the railways and fostered the development of agriculture, ranching, and other local industries that began primarily to support mining efforts. The opening of vast portions of the West for settlement with the various homestead acts also contributed to settlement of the area. See also Athearn (1981), Buckles and Buckles (1984), and Mehls (1984) for summaries of the historic era in the Colorado mountains. Eventually, tourism, including hunting, fishing, rafting, and skiing, became important to the local economy. Colorado experienced a skiing "boom" in the 1940's, and during the 1946-1947 season the Arapahoe Basin Ski Area began to serve tourists, followed by Breckenridge in 1961, and finally Copper Mountain in 1972 (Summit County Colorado 2016). The ski and tourist industries currently comprise a large part of the local economy.



FIELD METHODS

Field inventory involved pedestrian transects spaced at no greater than 20 m intervals over the inventory area. The survey area inventory was oriented to NAD 83 UTM Zone 13 cardinal directions. In-field navigation used GIS data on hand-held Trimble GeoExplorer 6000 GNSS units with real-time WAAS correction generally in the 1 m to 2 m range and post-processed correction to sub-meter. Metcalf's field team relied on ESRI format GIS data provided by SE Group of the locations of the various proposed developments; these were not staked in the field.

Ground visibility ranged from good to poor for discovery of artifacts and surface features. Ground surface visibility ranged from near 0% in the heavily forested areas up to 50% or more in exposed, grassy areas. Careful attention was paid to anthills, rodent backdirt piles, and subsurface exposures such as road cuts and disturbance areas, drainage cutbanks, and other localized eroded areas.

Upon discovery of cultural materials, the immediate area was more intensively examined to determine the nature and extent of the resource and determine if the resource should be considered a site, an isolated find, or a non-site. The WRNF defines a site as a locus of previous human activity at least 50 years old, at which the preponderance of evidence suggests either one-time diagnostically interpretable use or repeated use over time, or multiple classes of activities. An isolated find is defined as one or more culturally modified objects not found within the context of a site as described above. Isolated finds lack evidence of, or potential for, additional cultural materials or features in the immediate vicinity. Exceptions to this definition include a single core reduction event with a single core and associated reduction debitage; a pot/bottle drop representing a single vessel; or five or fewer prospect pits with/or without artifacts and with no associated historic structures or features. No artifacts were collected during the project inventory.

Metcalf characterizes artifacts in the field by class (e.g., debitage, flake tool, ground stone) and material type (e.g., chert, quartzite, sandstone). Debitage is described as primary, secondary, tertiary, or shatter to provide a rough idea of the predominant flintknapping stage represented by the assemblage. Primary flakes are defined as having 100 percent cortex on their dorsal surfaces; secondary flakes have between 0 and 100 percent cortex on their dorsal surfaces; tertiary flakes lack cortex; and shatter does not have a distinguishable ventral surface. Generally, only diagnostic artifacts are collected, and collection only occurs in limited circumstances with permission from the WRNF. All field notes, maps, and digital images are on file at the Metcalf office in Eagle, Colorado.

RESULTS

Five resources were newly recorded or revisited; two are sites (Table 3), and three are isolated finds. The two sites (5ST109, 5ST585) were previously recorded and were updated for the current project. Both are recommended not eligible for inclusion on the National Register, but avoidance of the cabin and cairn site (5ST109) is recommended. The three isolated finds are recommended as not eligible for inclusion on the National Register. Resource locations are provided in Appendix A; site sketch maps are in Appendix B; and OAHP cultural resource forms are in Appendix C (under separate cover). All appendices are included only in agency copies



and are not for public distribution. Finally, a list of native plants known to be present in the project area and documented as part of the biological studies for the project is provided.

Table 3. Sites

| Site No. | Class | Description | Eligibility | Recommendation |
|----------|----------|-----------------|-------------|-----------------|
| 5ST109 | Historic | Cabin and cairn | NE | Avoidance |
| 5ST585 | Historic | Mine shaft | NE | No further work |

SITES

5ST109. This previously recorded historic cabin and cairn site lies in the boundary of Copper Mountain Resort on federal land that is managed by the USDA Forest Service, WRNF. Measuring roughly 70-x-60 ft (22-x-19-m), it is situated on the north slope of Copper Mountain, east of north-trending Wheeler Gulch. Specifically, the site occupies a clearing on a small gently north-sloping bench, surrounded by a subalpine forest of spruce and fir trees (Figure 5). Very little underbrush or small plants are present, and pine duff largely blankets the surface. For that reason, no surface visibility is present, apart from the Forest Service trail which enters the site from the south and forks northwest and northeast at the cabin and cairn (Appendix B, Map 1). View of the surrounding area from the site is poor, limited by the thick forest. Sediment is brown loam of variable and shallow depth. Cobbles and boulders are exposed, with numerous small angular pebbles mixed in the loam. Slopewash has accumulated inside the cabin ruin along its western side. No stable deposition is present that exhibits the potential to preserve a buried and datable continuous cultural level. The site exhibits disturbance from erosion and deflation, and a signed Forest Service trail passes through it.

The site was revisited during the current project. It was found 300 ft south of the OAHP-plotted location, and its topographic plot has been updated. Originally recorded in 1976, the site is listed in OAHP files as “no evaluation;” the site form recommends it should be avoided and protected (Gordon and Kranzush 1976). It consists of a collapsed log cabin (Feature 1) and a cairn with an upright stone at its southern end (Feature 2). No artifacts were observed in association during the current revisit.

Feature 1 is the collapsed ruin of a log cabin, with its long axis oriented generally northwest-southeast (334°) (Figure 6). The north wall measures a maximum of 9 ft from log end to log end, and the east wall measures a maximum of 12’8” from log end to log end. The northeast corner (the most intact) is about 4 ft high, and eight courses of logs remain in that corner although they are askew. The logs at that corner are notched, and notching is visible at the southeast corner as well. Three partial logs remain along the west wall, and nine logs are present in various states along the north wall. A single cut log on the east wall suggests the presence of a window or door on that side. No artifacts or nails were observed. No evidence of the roof remains.





Figure 5. 5ST109 site overview southwest, with person at Feature 1 and with Feature 2 at far left (Roll 815-18, image 8, G. Williams, 10/03/2018).



Figure 6. 5ST109 Feature 1, cabin, view north. Note trail marker on tree at left (Roll 815-18, image 9, G. Williams, 10/03/2018).



The cabin has deteriorated in the four decades since original recording, at which time a milled lumber door with a sheared slide bolt lay to its southeast (Gordon and Kranzush 1976). The door originally opened to the south/southeast at the southwest corner of the structure. In addition, a low board shelf for sleeping or storage was observed in 1976 along the western wall. Square nails were present, no chinking was observed, and logs were noted to have been cut with a saw then notched with an axe.

Situated roughly 9 ft south of the cabin, Feature 2 was originally described as “a rock structure or cairn built of local slabs that appears to have been disturbed” (Gordon and Kranzush 1976). In 1976, measurements were recorded as 3’6”-x-2’4”-x-33” high. The sketch map indicates it was oriented north-south and rectangular, with the largest two slabs at the south end. It currently measures 8’2”-x-6’7”-x-21” high, and an upright stone reaching 21” in height forms the south edge of the rock cluster (Figure 7). The feature has gained about 4 ft in both length and width since original recording, probably through rock tumble. In addition, a depression about 1 ft in diameter was noted just 8” north of the upright stone. At least 20 rocks are currently present, and the smallest six stones lie loose on top of the other stones which are well-sodded-in.



Figure 7. 5ST109 Feature 2, cairn, view east, ruler at 2 meters (Roll 815-18, image 16, G. Williams, 10/03/2018).

As originally reported by Gordon and Kranzush (1976), the site was unlikely to have been a habitation based on the lack of a midden. Instead, “local authority Ms. Penny Lewis of Copper Mtn. indicated that this site could have been a sheepherder cache dating from about 1900.” In any case, there are no indicators of age or specific function preserved in association with the cabin and cairn. The site is not depicted on the 1883 GLO map, and no patents are on record in this legal section.



The site was not evaluated at original recording. Although it has deteriorated since that time, it currently retains some integrity, specifically the aspects of location, setting, feeling, and design. Integrity of materials is lacking, as no evidence remains of the cabin roof and many of the cabin's logs are missing. Also, the door and the shelf noted during original recording are no longer present. Further, integrity of workmanship is compromised by the ruined nature of the cabin. Finally, the site does not retain integrity of association, since it is not known to be associated with important people or events. With regard to the four NRHP criteria, the site is not associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), nor is it known to be associated with a significant person in our past (Criterion B) or to exhibit qualities that are notable examples of construction (Criterion C). Further, the site does not appear to exhibit the potential to contribute information to our history that is not already available in written or oral documentation (Criterion D). Therefore, although the site retains some integrity, it is recommended to be not eligible for inclusion on the NRHP. No further work is recommended, but avoidance of the site is recommended due to the unknown nature and function of the cairn, Feature 2.

5ST585. This previously recorded site consists of a spoil pile and a vertical rectangular shaft sunk into a northwest-facing mountain slope located northeast of and below Jacque Peak in Copper Mountain Resort (Figure 8). The area is tundra, vegetated with low thick grasses. Sediment is residual dark brown loam. A north-trending intermittent stream that drains into Jacque Creek lies far below the site, and Jacque Creek flows into Guller Creek, a tributary of West Tenmile Creek. Erosion, deflation, and structural decay have affected this site.

It was originally recorded by Mariah Associates during the Copper Bowl Survey (Acklen 1993), and the original topographic plot was shifted roughly 100 ft northeast during the current revisit (Appendix B, Map 2). Situated on federal land managed by the WRNF, the site measures roughly 30-x-26-ft (9-x-8-m). At its mouth, the shaft is 6.5 ft long, about 3 ft wide, and was reported by Acklen in 1993 to be 3 ft deep (Figure 9). It is now about 6 ft deep and appears to extend even deeper than that in the northwest corner. Also noted in 1993 was intact log cribbing on all the side walls. Observations made during the current revisit, however, noted the uppermost few rows of cribbing are detaching from the walls and collapsing into the shaft. A spoil pile covers the slope below the shaft and extends about 15 ft from the shaft's upper north side. Similar to the original recording, neither artifacts nor evidence of a superstructure were observed. Rather than a mine shaft as Acklen (1993) proposed, the lack of artifacts and a superstructure along with the shaft's small size suggest it may have instead functioned as a mine ventilation shaft.

The site's current evaluation is not eligible for inclusion on the National Register. Acklen (1993) made that recommendation because the site met no National Register criteria and was "not unique;" he stated that any data potential had been exhausted during survey. Metcalf found nothing during this current revisit to alter the existing recommendation of not eligible, although the site retains some integrity. As a mine-related feature, this isolated shaft appears to retain integrity of location, design, setting, materials, workmanship, and feeling, but lacks integrity of association with an important person or event. It meets none of the four National Register criteria. It is not associated with events that have made a significant contribution to the broad patterns of our history (Criterion A), and it is not known to be associated with an important



person in our past (Criterion B) or to exhibit qualities that are notable examples of construction (Criterion C). Further, the site does not appear to exhibit the potential to contribute information to our history that is not already available in written or oral documentation (Criterion D). No further work is recommended.



Figure 8. 5ST585 site overview west, with Jacque Peak at upper left of image (Roll 615-18, image 5, J. Scott, 10/05/2018).



Figure 9. 5ST585 Feature 1, vertical shaft, view northwest; tape at 1 m (Roll 615-18, image 2, J. Scott, 10/05/2018).



ISOLATED FINDS

Three isolated finds were newly recorded during this project (Table 4). All are recommended not eligible for inclusion on the National Register, and no artifacts were collected.

Table 4. Isolated finds

| Isolate No. | Class | Description |
|-------------|-------|--|
| 5ST1543 | H | Cultural material scatter including <50 artifacts, largely cans. Most of the cans, a brown bottle base with no maker's mark, and a large square can fragment measuring 9" diameter and 7" tall are in a 3-x-6-ft area in a ca. 20-x-20-inch circular depression that could be natural. A light scatter of cans covering 60-x-30-ft surrounds the concentration. Artifacts include 1 hole-in-cap can, 3" tall and 3" diameter with top removed; 4 hole-in-cap cans, 3" tall and 3" diameter, opened with a can-opener; 1 hole-in-cap can; 1 can 6" diameter, 7" tall, top missing; 2 4" tall cans, knife-opened; 9 crushed hole-in-cap cans; 1 solder dot milk can, knife-opened; 2 crushed indeterminate cans, 3" tall; 3 hole-in-cap cans, 4" diameter. |
| 5ST1544 | H | One prospect pit with a small spoil pile on the north side. The pit measures 8-x-6-ft and ca. 2.5 ft deep at max. |
| 5ST1545 | H | One prospect pit and a spoil pile. The pit measures 20-x-15-ft, and the center of the pit is about 5 ft below surface on the downhill side. The spoil pile is the same size as the pit and extends 15 ft downslope. |

PLANT LIST

At the request of Tom Fuller, a list of native plants that are documented in the Copper Mountain project area is included in Table 5. This list is taken from the botanical biological assessment and biological evaluation for this project (Orthner 2018). This information is provided primarily for the benefit of the Northern Ute Tribe, the Ute Mountain Ute Tribe, and the Southern Ute Tribe, representatives of which, in consultation with Mr. Fuller, have expressed interest in understanding the native vegetation communities that may be affected by projects on the WRNF, as the tribes historically occupied this area and used many plant species for food, shelter, medicinal, and other cultural uses; and retains interest in these plant communities.

Table 5. Vascular plant list, Copper Mountain project area

| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|---|------------------|------------|---------|
| Trees | | | |
| <i>Abies lasiocarpa</i> (=A. <i>bifolia</i>) | Subalpine fir | Pinaceae | N |
| <i>Picea engelmannii</i> | Engelmann spruce | Pinaceae | N |
| <i>Pinus contorta</i> var. <i>latifolia</i> | Lodgepole pine | Pinaceae | N |
| <i>Populus tremuloides</i> | Quaking aspen | Salicaceae | N |
| <i>Pseudotsuga menziesii</i> | Douglas-fir | Pinaceae | N |
| Shrubs/Subshrubs | | | |
| <i>Alnus incana</i> subsp. <i>tenuifolia</i> | Thinleaf alder | Betulaceae | N |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|--|------------------------------|-----------------|---------|
| <i>Betula glandulosa</i> | Bog birch | Betulaceae | N |
| <i>Gaultheria humifusa</i> | Alpine spicywintergreen | Ericaceae | N |
| <i>Linnaea borealis</i> | Twinflower | Caprifoliaceae | N |
| <i>Lonicera involucrata</i> (= <i>Distegia</i>) | Twinberry honeysuckle | Caprifoliaceae | N |
| <i>Macronema discoideum</i> | Whitestem goldenbush | Asteraceae | N |
| <i>Potentilla fruticosa</i> (= <i>Pentaphylloides floribunda</i>) | Shrubby cinquefoil | Rosaceae | N |
| <i>Ribes inerme</i> | Whitestem gooseberry | Grossulariaceae | N |
| <i>Ribes montigenum</i> | Alpine prickly currant | Grossulariaceae | N |
| <i>Ribes wolfii</i> | Wolf's currant | Grossulariaceae | N |
| <i>Salix brachycarpa</i> | Barrenground willow | Salicaceae | N |
| <i>Salix drummondiana</i> | Drummond's willow | Salicaceae | N |
| <i>Salix geyeriana</i> | Geyer willow | Salicaceae | N |
| <i>Salix monticola</i> | Mountain willow | Salicaceae | N |
| <i>Salix petrophila</i> (= <i>S. arctica</i> var. <i>petraea</i>) | Alpine willow | Salicaceae | N |
| <i>Salix planifolia</i> | Planeleaf willow | Salicaceae | N |
| <i>Salix wolfii</i> | Wolf's willow | Salicaceae | N |
| <i>Vaccinium myrtillus</i> | Whortleberry | Ericaceae | N |
| <i>Vaccinium scoparium</i> | Grouse whortleberry | Ericaceae | N |
| Perennial Graminoids | | | |
| <i>Agrostis gigantea</i> | Redtop | Poaceae | I |
| <i>Agrostis scabra</i> | Ticklegrass, Rough bentgrass | Poaceae | N |
| <i>Alopecurus pratensis</i> | Meadow foxtail | Poaceae | I |
| <i>Bromus ciliatus</i> (= <i>Bromopsis canadensis</i>) | Fringed brome | Poaceae | N |
| <i>Bromus inermis</i> | Smooth brome | Poaceae | I |
| <i>Calamagrostis canadensis</i> | Bluejoint reedgrass | Poaceae | N |
| <i>Carex aquatilis</i> | Water sedge | Cyperaceae | N |
| <i>Carex arapahoensis</i> | Arapaho sedge | Cyperaceae | N |
| <i>Carex aurea</i> | Golden sedge | Cyperaceae | N |
| <i>Carex chalciolepis</i> | Holm sedge | Cyperaceae | N |
| <i>Carex disperma</i> | Softleaf sedge | Cyperaceae | N |
| <i>Carex ebenea</i> | Ebony sedge | Cyperaceae | N |
| <i>Carex foenea</i> | Dryspike sedge | Cyperaceae | N |
| <i>Carex nigricans</i> | Black alpine sedge | Cyperaceae | N |
| <i>Carex norvegica</i> | Norway sedge | Cyperaceae | N |
| <i>Carex nova</i> | Black sedge | Cyperaceae | N |
| <i>Carex scopulorum</i> | Mountain sedge | Cyperaceae | N |
| <i>Carex utriculata</i> | Beaked sedge | Cyperaceae | N |
| <i>Dactylis glomerata</i> | Orchardgrass | Poaceae | I |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|---|--------------------------|---------------|---------|
| <i>Danthonia intermedia</i> | Timber oatgrass | Poaceae | N |
| <i>Deschampsia cespitosa</i> | Tufted hairgrass | Poaceae | N |
| <i>Elymus scribneri</i> | spreading wheatgrass | Poaceae | N |
| <i>Elymus trachycaulus</i> | Slender wheatgrass | Poaceae | N |
| <i>Festuca brachyphylla</i> subsp. <i>coloradensis</i> | Colorado fescue | Poaceae | N |
| <i>Festuca saximontana</i> | Rocky Mountain fescue | Poaceae | N |
| <i>Festuca thurberi</i> | Thurber's fescue | Poaceae | N |
| <i>Juncus arcticus</i> var. <i>balticus</i> (= <i>J. balticus</i>) | Arctic rush | Juncaceae | N |
| <i>Juncus drummondii</i> | Drummond's rush | Juncaceae | N |
| <i>Juncus parryi</i> | Parry's rush | Poaceae | N |
| <i>Luzula parviflora</i> | Millet woodrush | Juncaceae | N |
| <i>Phleum commutatum</i> | Alpine timothy | Poaceae | N |
| <i>Phleum pratense</i> | Timothy | Poaceae | I |
| <i>Poa alpina</i> | Alpine bluegrass | Poaceae | N |
| <i>Poa fendleriana</i> subsp. <i>longiligula</i> | Muttongrass | Poaceae | N |
| <i>Poa glauca</i> subsp. <i>rupicola</i> | Timberline bluegrass | Poaceae | N |
| <i>Poa palustris</i> | Fowl bluegrass | Poaceae | N |
| <i>Trisetum spicatum</i> | Spike trisetum | Poaceae | N |
| <i>Trisetum wolfii</i> | Wolf's trisetum | Poaceae | N |
| Perennial Forbs | | | |
| <i>Achillea lanulosa</i> | Yarrow | Asteraceae | N |
| <i>Aconitum columbianum</i> | Monkshood | Ranunculaceae | N |
| <i>Agoseris aurantiaca</i> | Orange agoseris | Asteraceae | N |
| <i>Agoseris glauca</i> | Pale agoseris | Asteraceae | N |
| <i>Androsace septentrionalis</i> | Pygmyflower rockjasmine | Primulaceae | N |
| <i>Anemonastrum narcissiflorum</i> subsp. <i>zephyrum</i> | Narcissus anemone | Ranunculaceae | N |
| <i>Anemone parviflora</i> | Smallflowered anemone | Ranunculaceae | N |
| <i>Angelica grayi</i> | Gray's angelica | Apiaceae | N |
| <i>Angelica pinnata</i> | Small-leaf angelica | Apiaceae | N |
| <i>Antennaria corymbosa</i> | Flat-top pussytoes | Asteraceae | N |
| <i>Antennaria media</i> | Rocky Mountain pussytoes | Asteraceae | N |
| <i>Antennaria parvifolia</i> | Small-leaf pussytoes | Asteraceae | N |
| <i>Antennaria pulcherrima</i> subsp. <i>anaphaloides</i> | Pearly pussytoes | Asteraceae | N |
| <i>Antennaria rosea</i> | Rosy pussytoes | Asteraceae | N |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|---|-----------------------------|-----------------|---------|
| <i>Aquilegia elegantula</i> | Western red columbine | Ranunculaceae | N |
| <i>Arnica cordifolia</i> | Heartleaf arnica | Asteraceae | N |
| <i>Arnica mollis</i> | Hairy arnica | Asteraceae | N |
| <i>Arnica parryi</i> | Parry's arnica | Asteraceae | N |
| <i>Artemisia campestris</i> var. <i>purshii</i> (= <i>A. borealis</i> ; <i>Oligosporus groenlandicus</i>) | Boreal sagewort | Asteraceae | N |
| <i>Artemisia scopulorum</i> | Dwarf sagewort | Asteraceae | N |
| <i>Astragalus alpinus</i> | Alpine milkvetch | Fabaceae | N |
| <i>Besseyia alpina</i> | Alpine kittentails | Plantaginaceae | N |
| <i>Bistorta bistortoides</i> | American bistort | Polygonaceae | N |
| <i>Bistorta vivipara</i> (= <i>Polygonum</i>) | Alpine bistort | Polygonaceae | N |
| <i>Boechera stricta</i> (= <i>B. drummondii</i>) | Drummond's rockcress | Brassicaceae | N |
| <i>Caltha leptosepala</i> (= <i>Psychrophila</i>) | Marsh marigold | Ranunculaceae | N |
| <i>Calypso bulbosa</i> | Fairy slipper orchid | Orchidaceae | N |
| <i>Campanula rotundifolia</i> | Harebell | Campanulaceae | N |
| <i>Campanula uniflora</i> | arctic bellflower | Campanulaceae | N |
| <i>Cardamine cordifolia</i> | Heartleaf bittercress | Brassicaceae | N |
| <i>Castilleja miniata</i> | Giant red Indian paintbrush | Orobanchaceae | N |
| <i>Castilleja occidentalis</i> | Western Indian paintbrush | Orobanchaceae | N |
| <i>Castilleja rhexifolia</i> | Splitleaf Indian paintbrush | Orobanchaceae | N |
| <i>Castilleja sulphurea</i> | Sulphur Indian paintbrush | Orobanchaceae | N |
| <i>Cerastium strictum</i> | Field chickweed | Caryophyllaceae | N |
| <i>Chamerion angustifolium</i> (<i>Epilobium</i>) | Fireweed | Onagraceae | N |
| <i>Cirsium arvense</i> (= <i>Breia</i>) | Canada thistle | Asteraceae | I B |
| <i>Cirsium eatonii</i> | Eaton's thistle | Asteraceae | N |
| <i>Cirsium scopulorum</i> | Mountain thistle | Asteraceae | N |
| <i>Conioselinum scopulorum</i> | Hemlock parsley | Apiaceae | N |
| <i>Cymopterus alpinus</i> (= <i>Oreoxis alpina</i>) | Alpine springparsley | Apiaceae | N |
| <i>Cymopterus lemmonii</i> (<i>Pseudocymopterus montanus</i>) | Moutain spring parsley | Apiaceae | N |
| <i>Delphinium barbeyi</i> | Subalpine larkspur | Ranunculaceae | N |
| <i>Draba aurea</i> | Golden draba | Brassicaceae | N |
| <i>Draba crassa</i> | Thickleaf draba | Brassicaceae | N |
| <i>Draba crassifolia</i> | Snowbed draba | Brassicaceae | N |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|--|-----------------------------|------------------|---------|
| <i>Dryas octopetala subsp. hookeriana</i> | Hooker's mountain-avens | Rosaceae | N |
| <i>Eremogone fendleri</i> | Fendler's sandwort | Caryophyllaceae | N |
| <i>Erigeron compositus</i> | Cutleaf daisy | Asteraceae | N |
| <i>Erigeron glacialis</i> (= <i>E. peregrinus subsp. callianthemus</i>) | Subalpine fleabane | Asteraceae | N |
| <i>Erigeron grandiflorus</i> (= <i>E. simplex</i>) | Alpine fleabane | Asteraceae | N |
| <i>Erigeron melanocephalus</i> | Blackhead fleabane | Asteraceae | N |
| <i>Erigeron speciosus</i> | Aspen fleabane | Asteraceae | N |
| <i>Eriogonum subalpinum</i> | sulphur-flower buckwheat | Polygonaceae | N |
| <i>Eritrichum aretioides</i> | Alpine forget-me-not | Boraginaceae | N |
| <i>Erysimum capitatum</i> | Western wallflower | Brassicaceae | N |
| <i>Fragaria virginiana</i> | Mountain strawberry | Rosaceae | N |
| <i>Gentiana algida</i> (= <i>Gentianodes</i>) | Arctic gentian | Gentianaceae | N |
| <i>Gentiana parryi</i> (= <i>Pneumonanthe</i>) | Parry's gentian | Gentianaceae | N |
| <i>Goodyera oblongifolia</i> | Rattlesnake plantain orchid | Orchidaceae | N |
| <i>Heterotheca villosa</i> | Hairy false goldenaster | Asteraceae | N |
| <i>Heuchera parvifolia var. nivalis</i> | Alpine alumroot | Saxifragaceae | N |
| <i>Hieracium triste</i> (= <i>Chlorocrepis</i>) | Slender hawkweed | Asteraceae | N |
| <i>Hirculus platysepalus subsp. crandallii</i> | Crandall's saxifrage | Saxifragaceae | N |
| <i>Hymenoxys grandiflora</i> (= <i>Rydbergia</i>) | Old Man of the Mountain | Asteraceae | N |
| <i>Lewisia pygmaea</i> | Alpine lewisia | Montiaceae | N |
| <i>Ligusticum tenuifolium</i> | Idaho licorice-root | Apiaceae | N |
| <i>Listera borealis</i> | Northern twayblade | Orchidaceae | N |
| <i>Listera cordata subsp. nephrophylla</i> | Heartleaf twayblade | Orchidaceae | N |
| <i>Mertensia alpina</i> | Alpine bluebells | Boraginaceae | N |
| <i>Mertensia ciliata</i> | Chiming bells | Boraginaceae | N |
| <i>Micranthes odontoloma</i> | Brook saxifrage | Saxifragaceae | N |
| <i>Micranthes rhomboidea</i> | Diamondleaf saxifrage | Saxifragaceae | N |
| <i>Mimulus glabratus</i> | Roundleaf monkeyflower | Scrophulariaceae | N |
| <i>Minuartia obtusiloba</i> (= <i>Lidia</i>) | Alpine stitchwort | Caryophyllaceae | N |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|---|---------------------------------|-----------------|---------|
| <i>Mitella pentandra</i> | Fivestamen miterwort | Saxifragaceae | N |
| <i>Moneses uniflora</i> | Wood nymph | Ericaceae | N |
| <i>Oreochrysum parryi</i> | Parry's goldenrod | Asteraceae | N |
| <i>Oxypolis fendleri</i> | Fendler's cowbane | Apiaceae | N |
| <i>Oxytropis deflexa</i> subsp. <i>deflexa</i> | Nodding locoweed | Fabaceae | N |
| <i>Oxytropis splendens</i> | Showy locoweed | Fabaceae | N |
| <i>Packera cana</i> | Woolly groundsel | Asteraceae | N |
| <i>Parnassia fimbriata</i> | Fringed grass of Parnassus | Parnassiaceae | N |
| <i>Paronychia pulvinata</i> | Rocky Mountain nailwort | Caryophyllaceae | N |
| <i>Pedicularis groenlandica</i> | Elephant's head lousewort | Orobanchaceae | N |
| <i>Pedicularis racemosa</i> subsp. <i>alba</i> | Sickletop lousewort | Orobanchaceae | N |
| <i>Penstemon whippleanus</i> | Whipple's penstemon | Plantaginaceae | N |
| <i>Phacelia sericea</i> | Silky phacelia | Hydrophyllaceae | N |
| <i>Platanthera dilatata</i> (= <i>Limnorchis dilatata</i>) | White bog orchid, scentbottle | Orchidaceae | N |
| <i>Platanthera huronensis</i> | Green bog orchid | Orchidaceae | N |
| <i>Platanthera obtusata</i> (= <i>Lysiella obtusata</i>) | Blunt-leaved orchid | Orchidaceae | N |
| <i>Polemonium pulcherrimum</i> subsp. <i>delicatum</i> | Jacob's-ladder | Polemoniaceae | N |
| <i>Polemonium viscosum</i> | Sticky polemonium | Polemoniaceae | N |
| <i>Potentilla diversifolia</i> | Varileaf cinquefoil | Rosaceae | N |
| <i>Potentilla hippiana</i> | Woolly cinquefoil | Rosaceae | N |
| <i>Potentilla nivea</i> | Snow cinquefoil | Rosaceae | N |
| <i>Potentilla pulcherrima</i> | Beautiful cinquefoil | Rosaceae | N |
| <i>Primula parryi</i> | Parry's primrose | Primulaceae | N |
| <i>Pterospora andromedea</i> | Woodland pinedrops | Ericaceae | N |
| <i>Pulsatilla patens</i> subsp. <i>multifida</i> | Pasque flower | Ranunculaceae | N |
| <i>Pyrola chlorantha</i> | Greenflowered wintergreen | Ericaceae | N |
| <i>Pyrola rotundifolia</i> subsp. <i>asarifolia</i> | Roundleaf wintergreen | Pyrolaceae | N |
| <i>Rhodiola rhodantha</i> (= <i>Clementsia</i>) | Queen's crown, redpod stonecrop | Crassulaceae | N |
| <i>Rumex acetosella</i> (= <i>Acetosella vulgaris</i>) | Sheep sorrel | Polygonaceae | I |
| <i>Saxifraga bronchialis</i> var. <i>austromontana</i> | Spotted saxifrage | Saxifragaceae | N |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|--|------------------------------|-----------------|---------|
| (= <i>Ciliaria austromontana</i>) | | | |
| <i>Saxifraga rivularis</i> | Weak saxifrage | Saxifragaceae | N |
| <i>Sedum lanceolatum</i> | Stonecrop | Crassulaceae | N |
| <i>Senecio amplexans</i> var. <i>amplexans</i> (= <i>Ligularia</i>) | Showy alpine ragwort | Asteraceae | N |
| <i>Senecio atratus</i> | Tall blacktip ragwort | Asteraceae | N |
| <i>Senecio crassulus</i> | Thickleaf ragwort | Asteraceae | N |
| <i>Senecio fremontii</i> var. <i>blitoides</i> | Dwarf mountain ragwort | Asteraceae | N |
| <i>Senecio integerrimus</i> | Lambstongue groundsel | Asteraceae | N |
| <i>Senecio triangularis</i> | Arrowleaf groundsel | Asteraceae | N |
| <i>Sibbaldia procumbens</i> | Creeping sibbaldia | Rosaceae | N |
| <i>Silene acaulis</i> | Moss campion | Caryophyllaceae | N |
| <i>Silene drummondii</i> (= <i>Gastrolychnis</i>) | Drummond's catchfly | Caryophyllaceae | N |
| <i>Smelowskia americana</i> (= <i>S. calycina</i> var. <i>americana</i>) | American false candytuft | Brassicaceae | N |
| <i>Solidago multiradiata</i> | Rocky Mountain goldenrod | Asteraceae | N |
| <i>Spiranthes romanzoffiana</i> | Hooded lady's tresses | Orchidaceae | N |
| <i>Swertia perennis</i> | Star gentian; felwort | Gentianaceae | N |
| <i>Symphyotrichum foliaceum</i> (= <i>Aster</i>) | Leafy bracted aster | Asteraceae | N |
| <i>Symphyotrichum lanceolatum</i> subsp. <i>hesperium</i> (= <i>Aster</i>) | White panicle aster | Asteraceae | N |
| <i>Taraxacum officinale</i> | Dandelion | Asteraceae | I |
| <i>Thalictrum alpinum</i> | Alpine meadow-rue | Ranunculaceae | N |
| <i>Tonestus pygmaeus</i> (= <i>Haplopappus</i>) | Pygmy goldenweed | Asteraceae | N |
| <i>Trifolium dasyphyllum</i> | Alpine clover | Fabaceae | N |
| <i>Trifolium nanum</i> | Dwarf clover | Fabaceae | N |
| <i>Trifolium parryi</i> | Parry's clover | Fabaceae | N |
| <i>Trifolium pratense</i> | Red clover | Fabaceae | I |
| <i>Trifolium repens</i> | White clover | Fabaceae | I |
| <i>Trollius albiflorus</i> | American globeflower | Ranunculaceae | N |
| <i>Valeriana capitata</i> subsp. <i>acutiloba</i> | sharp-leaf valerian | Valerianaceae | N |
| <i>Veronica nutans</i> | American alpine speedwell | Plantaginaceae | N |



| SCIENTIFIC NAME | COMMON NAME | FAMILY | ORIGIN* |
|--|--------------------------------|-----------------|---------|
| <i>Viola adunca</i> | Hookedspur violet | Violaceae | N |
| <i>Viola macloskeyi</i> subsp. <i>pallens</i> | Smooth white violet | Violaceae | N |
| <i>Zigadenus elegans</i> (=Anticlea) | Mountain deathcamas | Melanthiaceae | N |
| Ferns and Fern Allies | | | |
| <i>Botrychium crenulatum</i> | Crenulate moonwort | Ophioglossaceae | N |
| <i>Botrychium echo</i> | Echo moonwort | Ophioglossaceae | N |
| <i>Botrychium lanceolatum</i> subsp. <i>lanceolatum</i> | Triangle moonwort | Ophioglossaceae | N |
| <i>Botrychium minganense</i> | Mingan moonwort | Ophioglossaceae | N |
| <i>Botrychium neolunaria</i> | Common moonwort | Ophioglossaceae | N |
| <i>Botrychium pinnatum</i> | Oakleaf moonwort | Ophioglossaceae | N |
| <i>Cryptogramma acrostichoides</i> | American rockbrake | Pteridaceae | N |
| <i>Cystopteris fragilis</i> | Fragile fern | Dryopteridaceae | N |
| <i>Cystopteris montana</i> | Mountain bladderfern | Dryopteridaceae | N |
| <i>Equisetum arvense</i> | Field horsetail | Equisetaceae | N |
| <i>Equisetum laevigatum</i> (=Hippochaete) | Smooth horsetail | Equisetaceae | N |
| <i>Equisetum variegatum</i> subsp. <i>variegatum</i> (=Hippochaete) | variegated scouringrush | Equisetaceae | N |
| <i>Lycopodium annotinum</i> | Stiff clubmoss | Lycopodiaceae | N |
| <i>Selaginella densa</i> | Rocky Mountain spikemoss | Selaginellaceae | N |
| Annual/Biennial Forbs | | | |
| <i>Gentianopsis thermalis</i> | Rocky Mountain fringed gentian | Gentianaceae | N |
| <i>Thlaspi arvense</i> | Field pennycress | Brassicaceae | I |
| <i>Tripleurospermum perforatum</i> | Scentless chamomile | Asteraceae | I B |
| Notes: Nomenclature generally follows Flora of Colorado (Ackerfield 2015) with Weber and Wittmann (2012) synonyms in parentheses. Origin: N=Native; I=Introduced, I+A,B,C,W = Colorado Listed Noxious Weed and Rank. Plants Code: National Code from the NRCS PLANTS National database. Prepared by Rea Orthner of Peak Ecological Services, LLC, Nederland, CO. | | | |

EVALUATION OF RESEARCH

Metcalf considers the results of this inventory reliable and representative of the area. Although ground visibility was obscured by dense vegetation in some locations and by dense



pine duff in others, field conditions were adequate for the discovery of cultural resources. The previously unrecorded cultural resources that were found and recorded were expected, given the existing sites and isolates in the area.

SUMMARY AND MANAGEMENT RECOMMENDATIONS

Metcalf undertook cultural resource investigations under contract to SE Group, Inc., at Copper Mountain Resort, Summit County, Colorado, because the resort has proposed multi-season improvements. At the time of October fieldwork, the project area covered 570 acres. Because 374 acres had been previously inventoried for cultural resources, fieldwork included 196 acres of Class III pedestrian inventory in areas not covered by previous recent inventories. After Metcalf conducted the October fieldwork, project design changes were made in December, 2018; thus, some proposed developments in the updated project area have not yet been inventoried for cultural resources. These new developments, consisting of trails and camp sites, cover 84 acres and will be surveyed in the 2019 field season and reported as an addendum to this document. It is anticipated that any newly discovered NRHP eligible cultural resources during 2019 survey will be avoided because the location of the proposed trails and campsites is flexible and can be easily re-designed.

During October fieldwork, five resources were newly recorded or revisited. Two are sites, and three are isolated finds. The three isolated finds are recommended as not eligible for inclusion on the National Register. The two sites (5ST109, 5ST585) were previously recorded and were updated for the current project. Both are recommended not eligible for inclusion on the National Register; however, avoidance of historic site 5ST109 is recommended due to the unknown nature and function of the cairn, Feature 2.

In addition, the OAHP-mapped site location of a collapsed and decaying multi-room log cabin with a small midden (5ST110) fell in the survey area; it was not evaluated during recording in 1976. This site was not observed during the October inventory, however, its location also overlaps the portion of the redesigned project area proposed for 2019 fieldwork; another attempt will be made to relocate the site at that time. It is possible that, if found, the site could extend into the currently reported project area.

Pending the relocation of unevaluated historic site 5ST110 in the summer of 2019, Metcalf recommends a finding of *no historic properties* for the currently reported project area. With avoidance of site 5ST109, no further work is recommended for the currently reported project area.



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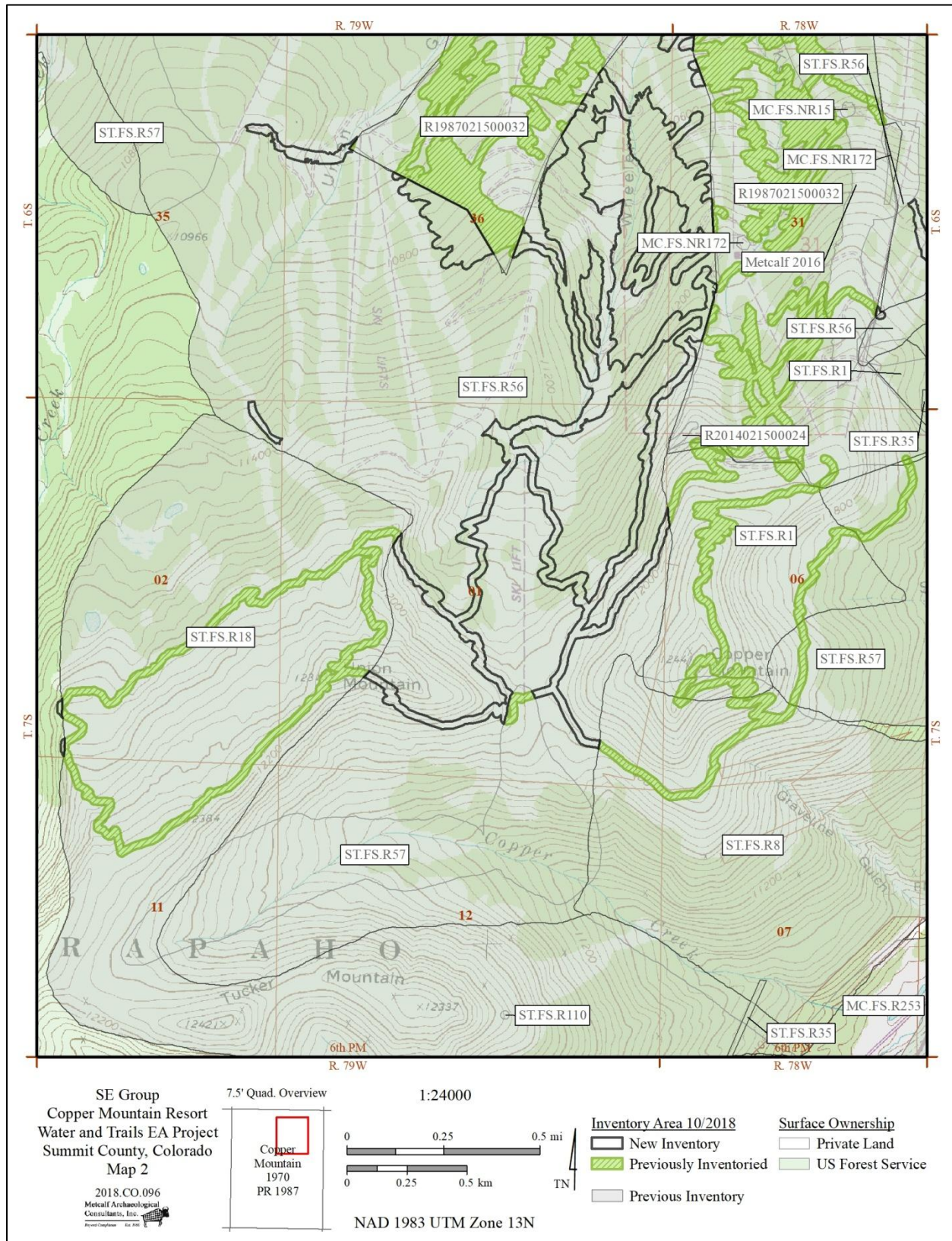


APPENDIX A

Project Area Maps with Cultural Resources and Previous Inventories (agency copies only)

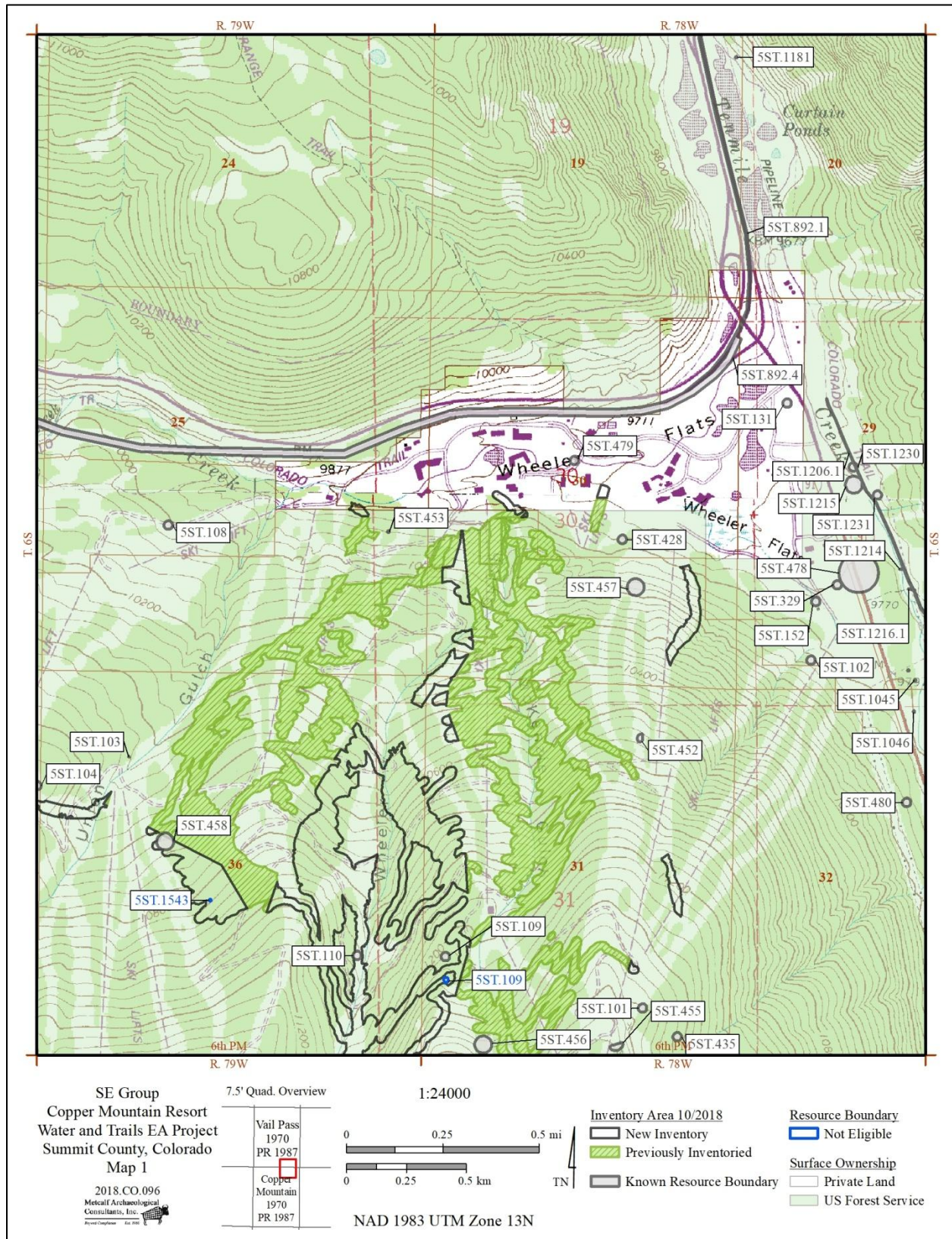






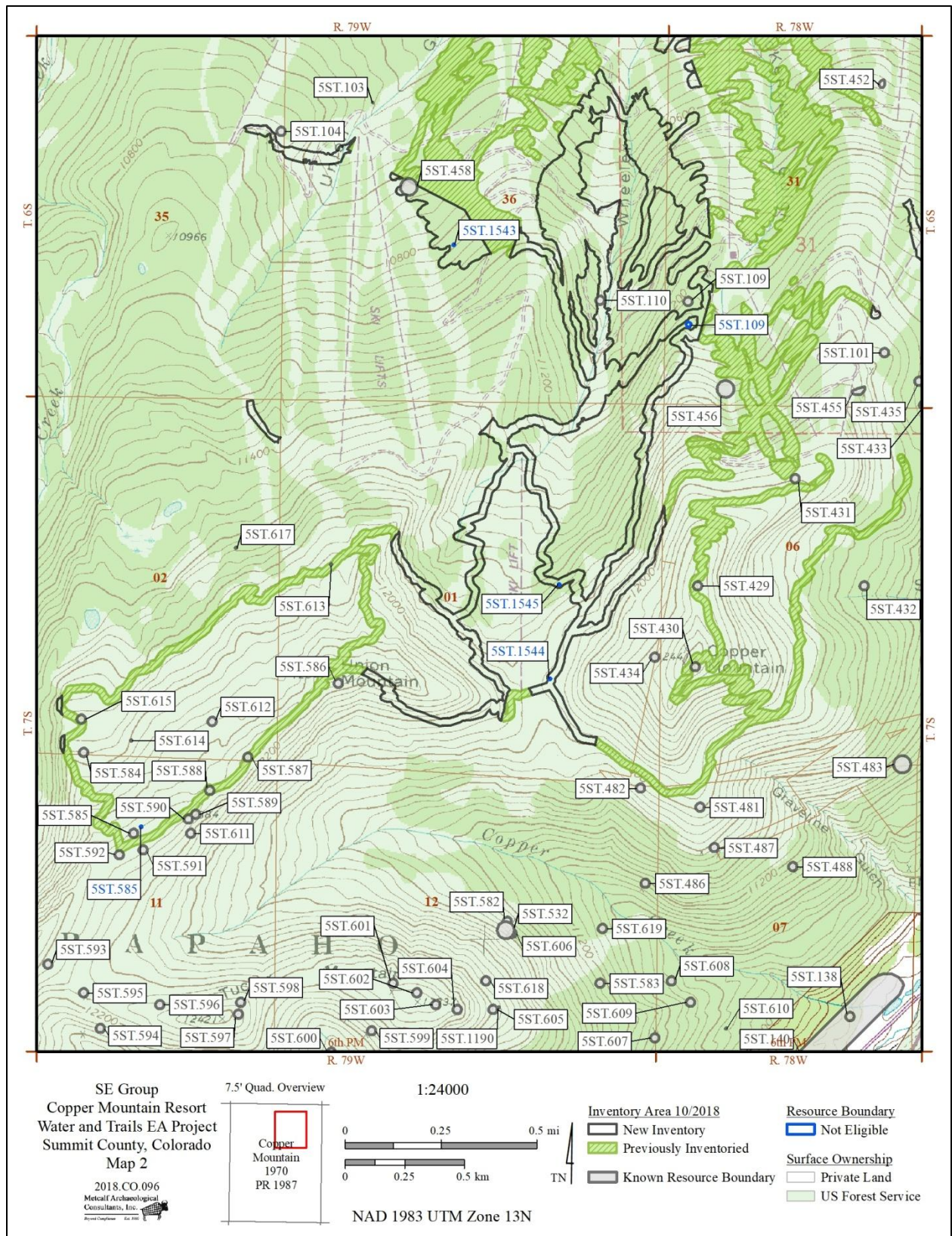
Map 2. Project area location, October 2018 fieldwork, previous inventories, Map 2 of 2.





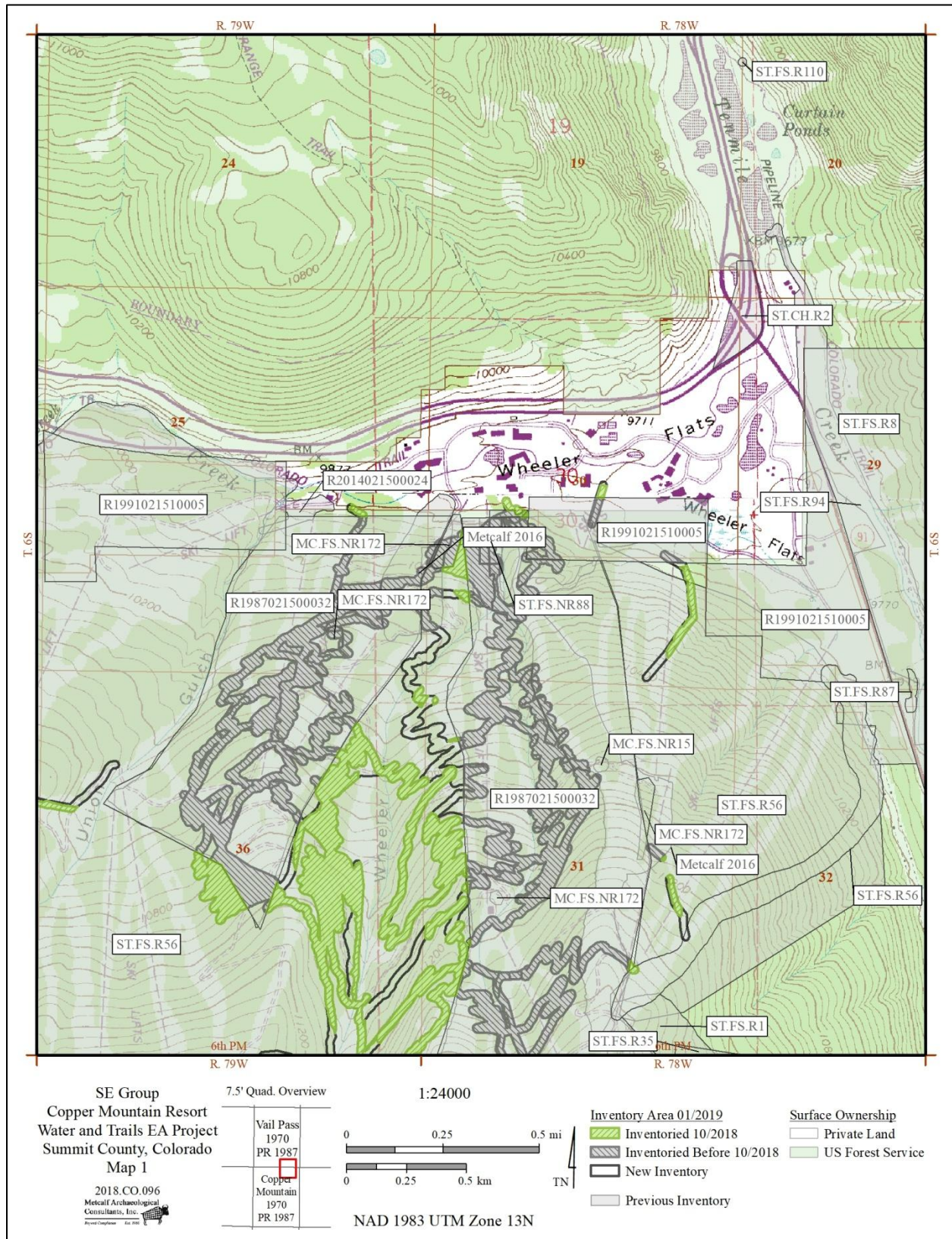
Map 3. Project area location, October fieldwork, resources, Map 1 of 2.





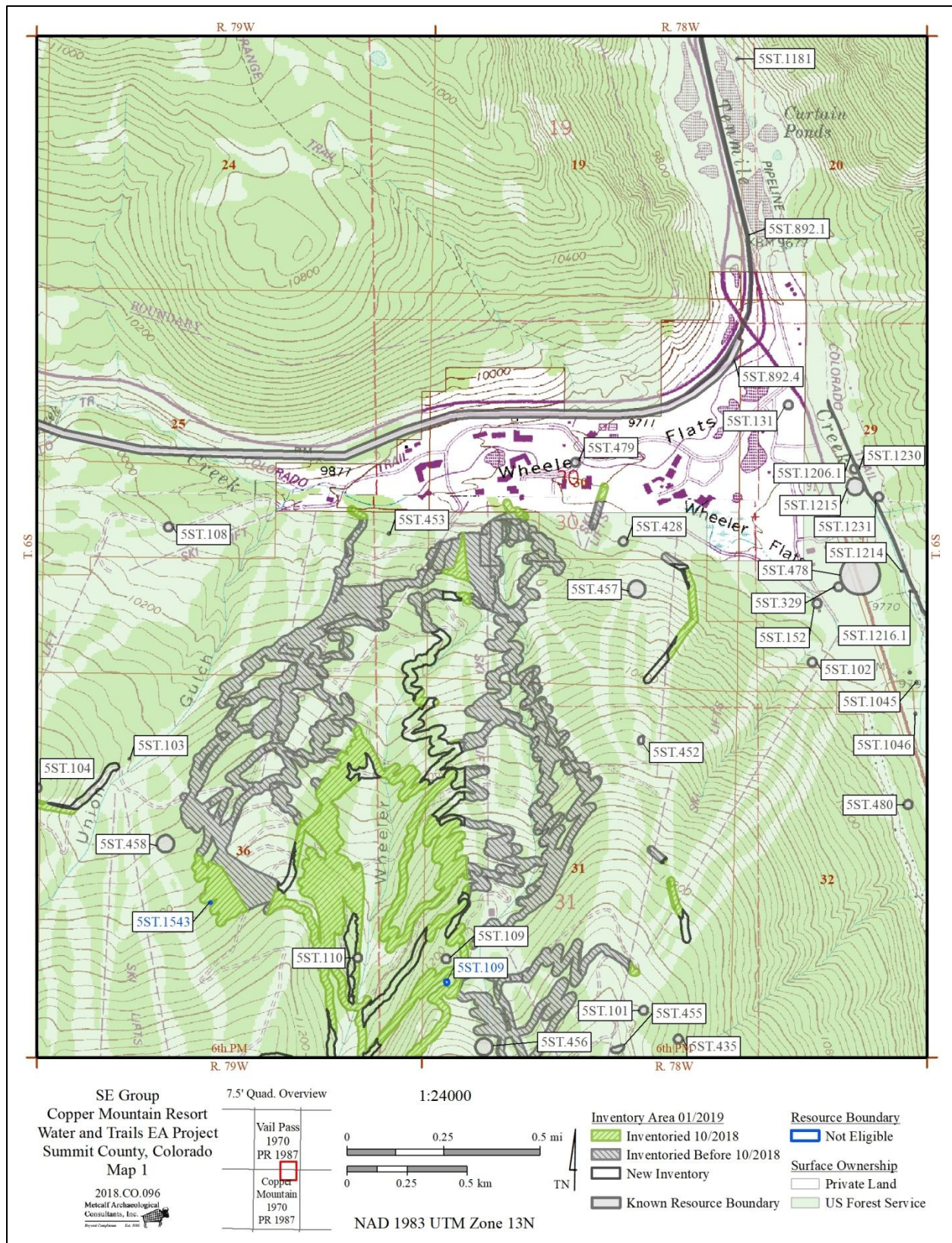
Map 4. Project area location, October fieldwork, resources, Map 2 of 2.





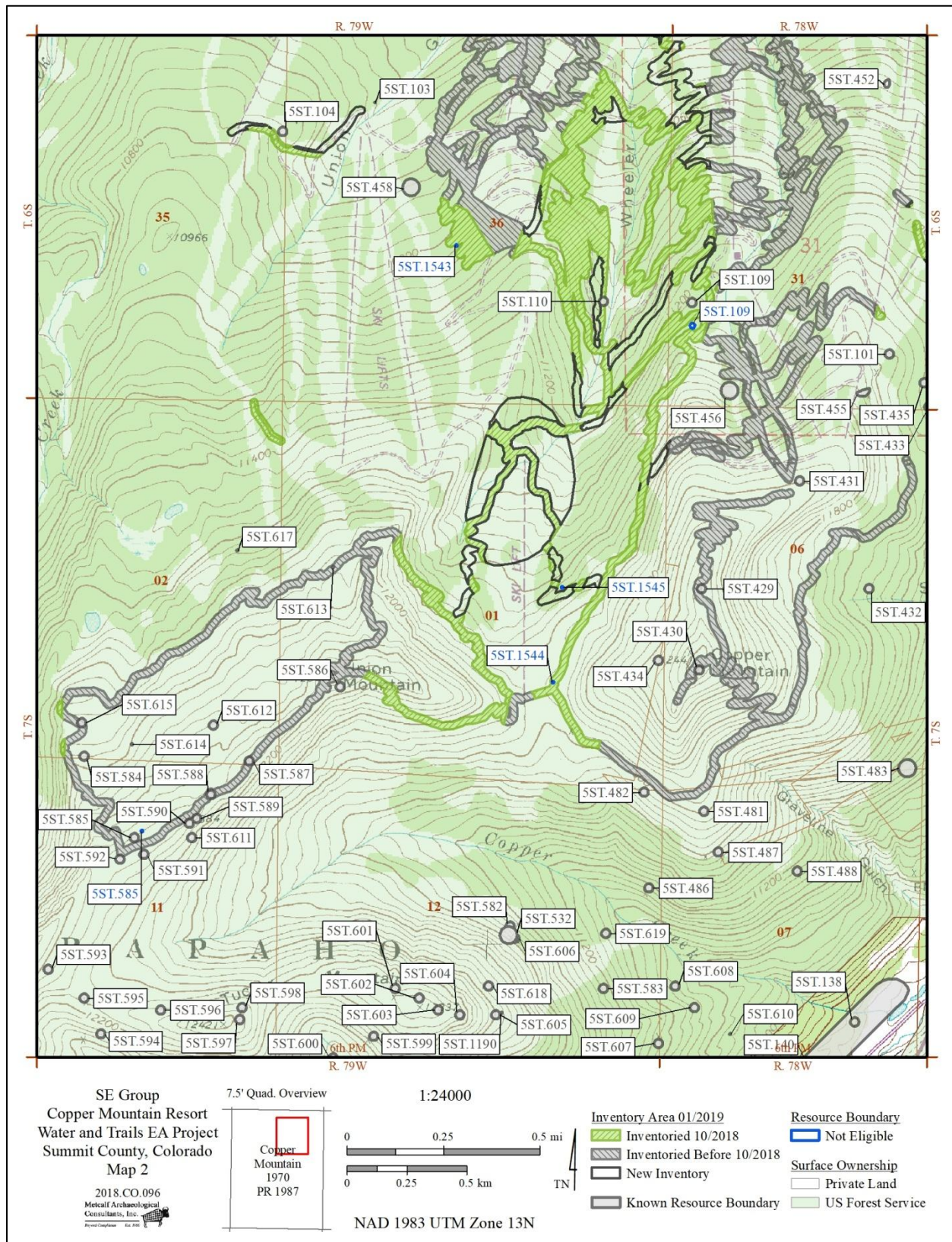
Map 5. Project area location, planned 2019 fieldwork, previous inventories, Map 1 of 2.





Map 7. Project area location, planned 2019 fieldwork, previous resources, Map 1 of 2





Map 8. Project area location, planned 2019 fieldwork, previous resources, Map 2 of 2

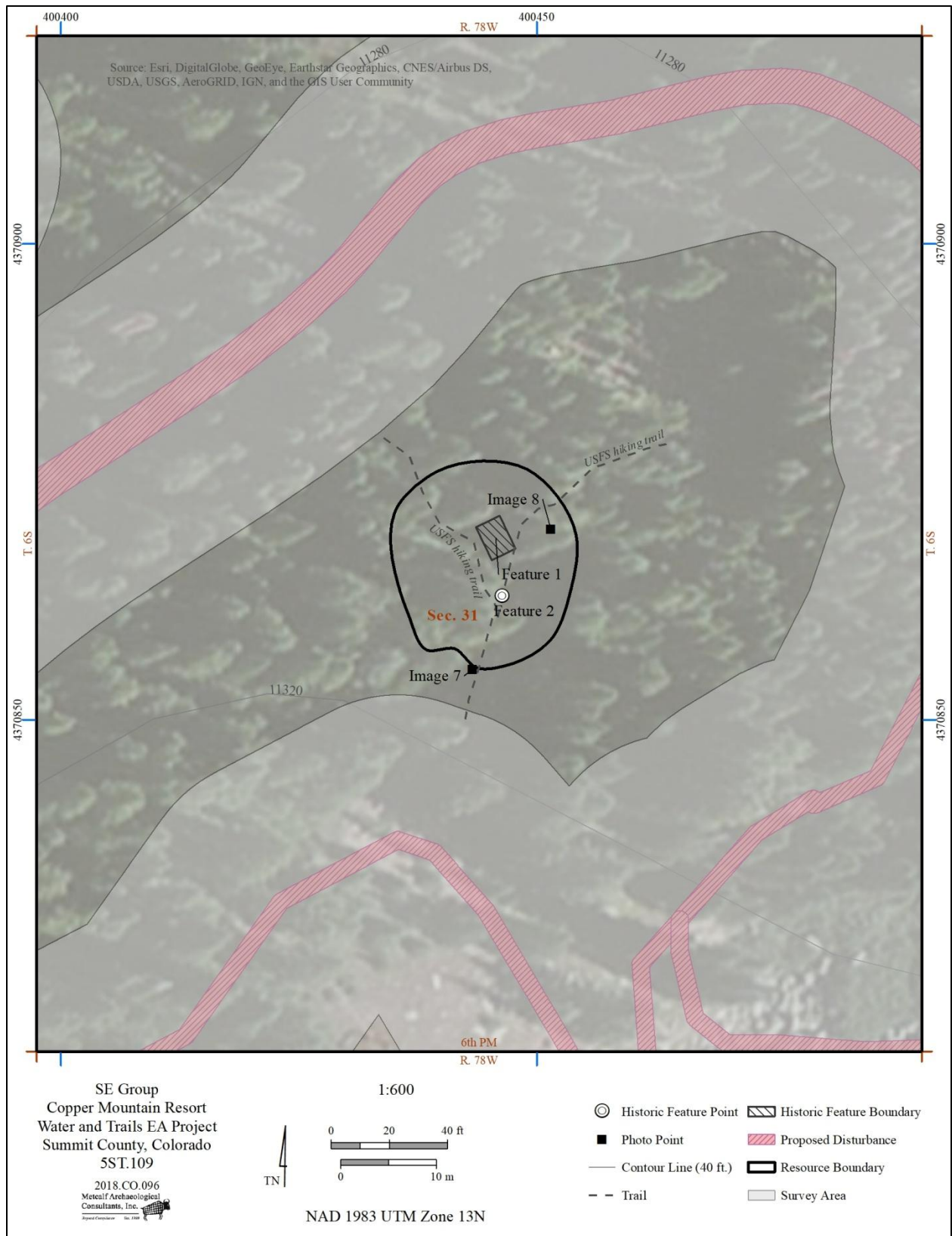


APPENDIX B

Site Sketch Maps (agency copies only)

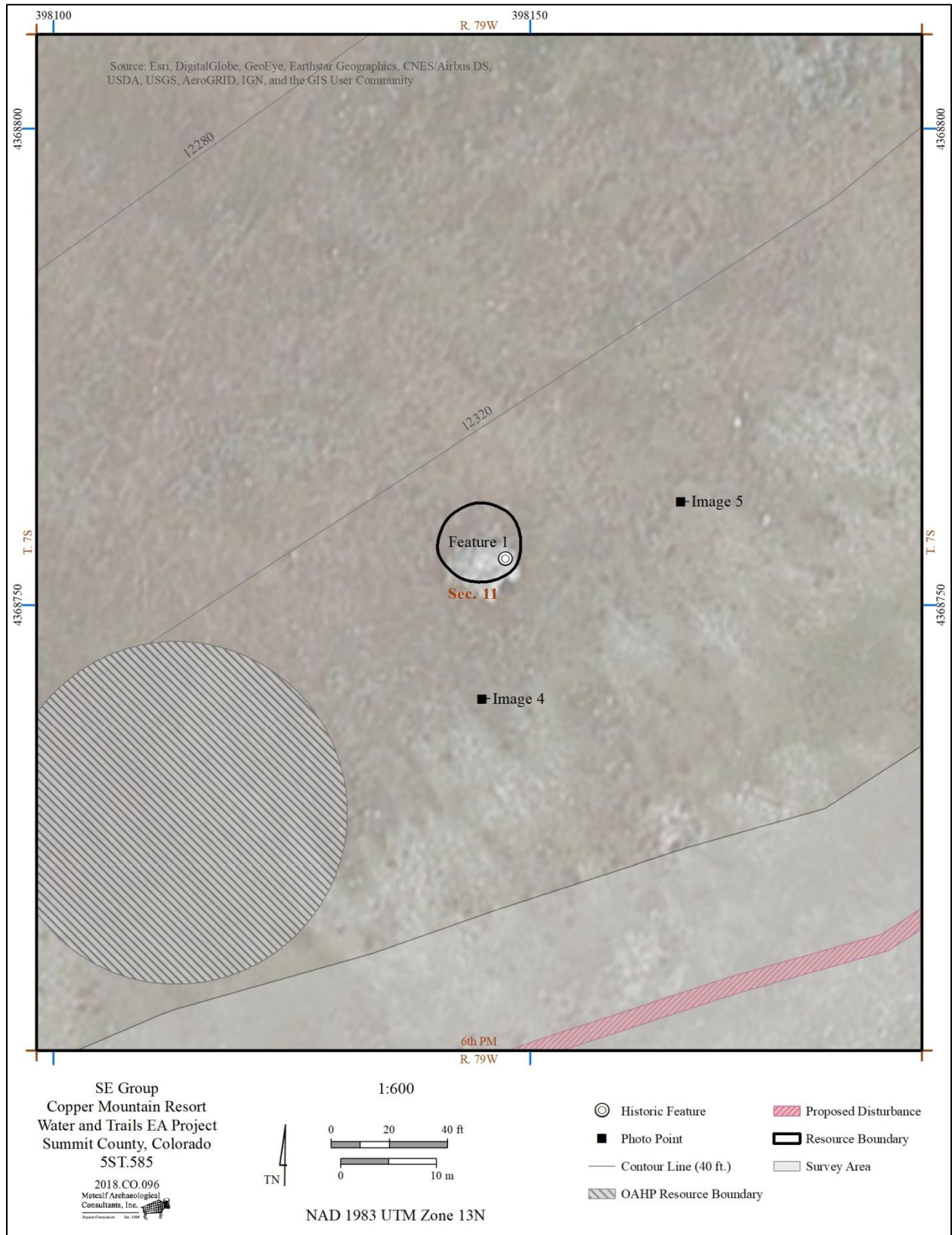






Map 1. 5ST109 map





Map 2. 5ST585 map



APPENDIX C

OAHP Cultural Resource Forms (separate cover, agency copies only)



